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ABSTRACT

Activities and findings of the Higher Education Management Institute are reviewed as of October 1976. In general, the initial assumption of need is borne out by responses from 557 colleges, since no more than 2 percent of higher education institutions have any management development and training programs underway. This report describes the project organization with regard to the pilot colleges and universities, the Exxon Foundation, consultants and subcontractors, private corporations and public agencies, and vendors of materials and programs. Major project activities and the management development and training program are detailed, along with the selection of pilot institutions. Also described is the state-of-the-art management development and training and a model for these activities in colleges and universities. Approaches, available programs and materials, and theories of organizational functioning are reviewed. The adaptation of industrial survey-guided needs assessment to higher education is discussed and a proposed methodology for evaluating the effectiveness of the program is given. Working papers, a summary of college and university proposals received, and a bibiliography are appended. (LBH)

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Management Development and Training Program for Colleges and Universities

Progress Report 2

October 1976

ED149648

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A Project to Design, Develop, Test and Disseminate a

Management Development and Training Program for Colleges and Universities

to be carried out by the non-profit
Higher Education Management Institute

supported by a grant from
The Exxon Education Foundation

PROGRESS REPORT #2

OCTOBER, 1976

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A. List of Working Papers

B. Summary of College and University Proposals Received

C. Dr. Bolman's Letter

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SUMMARY

This report reviews the activities and findings of the Higher Education Management Institute, as of October, 1976.

IN GENERAL IT SEEMS THAT...

- the initial assumption of need tends to have been borne out by the 557 colleges that responded to Dr. Bolman's letter inviting them to participate.
- no more than 2% of colleges and universities have any semblance of management development and training underway.
- less than half a dozen institutions have organized programs that reach academic managers.

THE PROJECT HAS...

- many individuals and organizations with a great deal of experience, contributing to it.
- the pilot colleges and universities to provide a natural experiential base for evolving the most appropriate program.
- the professional and academic staffs of the pilot colleges which may contribute much to the development of the materials and procedures used.
- a variety of consultants and sub-contractors to be used in order to get the most cost effective assistance.
- a number of private corporations and public agencies with experience in management development and training to advise it.
- related to organizations and associations concerned with higher education management, kept them informed and sought their advice.
- encouraged vendors of materials and programs to play a role where appropriate under arrangements designed to protect their proprietary interests.

THE MAJOR PROJECT ACTIVITIES INCLUDE...

- the initial establishment of the Institute, a review of existing materials and programs, and the selection of pilot institutions, all of which have been completed.

- the development of a Needs Assessment system, incorporating Rensis Likert's industrial management profile methodology.

- carrying out needs assessments of the 24 pilot institutions during the next three months.

- the development of prototype materials and procedures beginning in the next quarter.

- the field testing of parts of the program, most likely beginning in the third quarter of 1977.

THE MANAGEMENT DEVELOPMENT AND TRAINING PROGRAM INVOLVES...

- five major phases, as it is currently conceptualized:

  I Introduction
  II Needs Assessment
  III Planning
  IV Implementation
  V Evaluation

- a variety of institutional support activities needed now and in the longer term, including:

  - on-site assistance for the program
  - data processing and maintaining computer, as well as hard copy based data banks
  - monitoring the state-of-the-art
  - adapting development and training materials
  - producing manuals, bulletins and special reports
  - liaising with associations and organizations concerned with management development and training
  - reviewing, evaluating and modifying the program

THE SELECTION OF PILOT INSTITUTIONS...

- used procedures biased to select institutions most committed to management improvement in general, and management training in particular.
- involved other criteria to obtain representativeness with regard to control, enrollment, setting, financial condition, etc.
- was made from 557 institutions that responded, or 18.5% of those who received Dr. Solman's letter
- after a variety of screening and evaluation techniques, including on-site visits, led to inviting 24 institutions to participate.

THE POTENTIAL NUMBER OF PARTICIPANTS THE PROGRAM COULD SERVE INCLUDES...

- approximately 102,000 middle and upper level managers in over 3,000 colleges and universities in the United States.
- an estimated 10,000 individuals moving annually to a first, or significantly different, management position from the estimated annual turnover of 18,000.

OUR REVIEW OF THE CURRENT STATE-OF-THE-ART SHOWED...

- few colleges and universities have in-house management development and training programs.
- available programs offered by outside agencies are often superficial, uncoordinated, and not directed to the specific needs of institutions.
- the literature on higher education management has little to contribute to the field of Management Development and Training.
- the survey-guided approach to organizational improvement developed by Rensis Likert and his colleagues at the Institute for Social Research, shows great promise for higher education management.

OUR ADAPTATION OF INDUSTRIAL SURVEY-GUIDED NEEDS ASSESSMENT TO HIGHER EDUCATION...

- was as a result of a review of industrial experiences which led to Rensis Likert's survey-guided needs assessment procedure which was adapted with his participation to higher education.

- includes the board members, president, vice presidents, deans, department heads, faculty, students, non-instructional managers, and non-instructional employees in the assessment process.

- looks at five causal management variables:

  - organizational climate
  - leader behavior
  - organization policy and procedures
  - organizational structure, objectives and programs
  - objectives and methods

- includes three intervening work group variables:

  - coordinator, peer and subordinate behavior
  - team interaction
  - work group climate

- measures institutional outcome variables on students, relating to their knowledge and skills, development, social, personal and career preparation and general satisfaction

- measures job and professional satisfaction, as well as employer-employee relations for managers, faculty and staff, as part of the assessment

- measures these variables through a series of indices, with each index based on 3 to 6 questions

- analyzes survey data by computer and produces reports, giving both detailed and specific information for work groups, and comparative information within and across institutions

OUR PROPOSED METHODOLOGY FOR EVALUATING THE EFFECTIVENESS OF THE PROGRAM IS BASED ON THE ASSUMPTION THAT...

- the pilot institutions will probably evolve into four different statuses:

  I Those that proceed with intensive Institute assistance.

  II Those that proceed with largely their own internal direction and resources.

  III Those that pause before proceeding.

  IV Those that discontinue their active involvement.

- these four different statuses will allow the Institute, and each institution, to re-evaluate their situation eighteen months hence, and thus assess the impacts on the causal, intervening and outcome measures of the various parts of the program.

1. INTRODUCTION

1.1 Overview

After almost seven months of activity, most preliminary research activities are behind us and we are now working with 24 colleges and universities in the first phase of creating a management development and training program to meet their needs. The Institute staff, consultants and subcontractors have worked hard and, we believe, productively to bring us to this point. It is the purpose of this report to describe what has been accomplished thus far and what is planned for the future.

The 557 colleges and universities that responded to Dr. Bolman's letter inviting them to participate in the program, the 454 that submitted proposals and the literally hundreds of telephone calls that we received, provide substantial evidence of not only the need, but also the growing desire on the part of higher education institutions to put in place a management development and training program specifically designed to meet their needs.

From the responses we received and from our own review of current activities, it is clear that no more than 2% of the colleges and universities in the United States have any semblance of management development training underway. Furthermore, no more than a dozen institutions have significant programs with full or part time directors, and of these even fewer have programs directed to academic, as distinct from non-instructional managers, managers as opposed to faculty.

The paradox is that, while little management development and training is taking place in the colleges and universities, these institutions themselves, along with other public and private organizations, are delivering management development and training services to large numbers of private corporations and public agencies. One of the major tasks of this project is to learn from the successes and failures of these activities, adapt this body of knowledge and techniques to the special needs of higher education management, and tap the resources that exist within the higher education community to develop and deliver these services.

The concepts, procedures and programs that will be tested and evaluated by the participating institutions in the project will be drawn from a broad base of experience. They will not be merely theoretical hypotheses, but on the other hand, the uniqueness of the higher education enterprise calls for sharp attention to and assessments of each part of the program as it is developed, from all concerned with this project.

While the Institute and the project have many different corporate and individual advisors, as can be seen in the next section on project organization, the advice and criticism to be offered by the pilot institutions, their management, their own management development coordinators where they exist, and their academic staff in this field are essential, if we are to achieve our objectives.

1.2 Why the Project was Created

The limited but rather convincing experiential evidence to date tends to confirm the original propositions upon which the project was based. They are:

1. The Exxon Education Foundation and its advisors believe that the lack of formal training of higher education managers is a significant roadblock to improving efficiency and effectiveness of colleges and universities.

2. Available management training materials and programs are often superficial, uncoordinated, and not necessarily directed to the priority needs of each institution.

3. A program is needed that will focus firstly on improving the overall organizational functioning, but at the same time incorporate the training needs and career plans of the individuals within the institutions.

4. An on-site program with a high degree of flexibility and adaptability is needed to meet the needs of administrators ususally promoted from within the academic ranks and with little or no formal management training.

5. A program is needed that will span academic, student and business affairs, coordinating their management development and training activities and focusing on meeting the goals and objectives of the institution as a whole.

1.3 Basic Management Assumptions

No program of this kind can be developed in total or in its various parts without relying on some implicit if not explicit, set of management philosophies or models. We will attempt throughout this project to be as explicit as possible about the underlying assumptions we are using and the justification we see for them.

Perhaps our most basic initial assumptions are that we believe that an institution is well managed when it has:

1. Defined a set of goals and objectives in terms that are quantifiable and/or observable and when the managers and staff of the institution are thoroughly familiar and in substantial agreement with those goals and objectives.

2. Put in place a set of policies and procedures for the efficient allocation and management of resources available to it for the achievement of its goals and objectives.

3. Developed an organizational structure and climate that fosters a high degree of motivation among its managers and staff and a climate conducive to working together toward the institutional goals and objectives.

Additional important hypotheses and assumptions are described in Sections 4, 7, 8 and 9.

2. PROJECT ORGANIZATION

The organization of the project diagrammed in Figure 1, is being used on the assumption that,while formal management development and training is relatively new for colleges and universities, it is not for many other types of organizations. It is a field of knowledge with many expert individuals and organizations who have a great deal of experience to contribute. For that reason, the Institute staff is deliberately being kept small and maximum use is being made of expert consultants and subcontractors in addition to a network of formal and informal relationships with a variety of types of organizations and individuals.

2.1 The Pilot Colleges and Universities

The institutions that will be participating as pilot institutions in each of the stages of the project will be making several important contributions to the project. Firstly, the management of those institutions in all parts, academic, business and student affairs, and at several levels, will help to provide a perspective on, in the beginning, the needs of management development training, and after that, on the effectiveness of various methods for carrying out the program. Some of the pilot colleges are representative of institutions that have the most advanced internal management development training programs that are currently underway. From these programs and the individuals responsible for preparing and carrying them out, we hope to be able to learn of their successes and failures and, where appropriate, work with them to adapt their materials and methodologies to the broader needs of the higher education community, as these are defined in the course of the project. The academic staff members that teach management related subjects within the pilot institutions also represent a wealth of potential contributions, both in terms of contributing material, as well as critiquing the materials and programs that are used.

Perhaps most important of all, the pilot institutions will keep the project on a practical footing, since it is the objective of the Institute to ensure that each of the pilot institutions has a program developed to meet its specific needs with the objective of generalizing from this to the broader higher education community as a secondary objective.

Higher Education Magagement Development and Training Program for Colleges and Universities

Project Organization and Resources

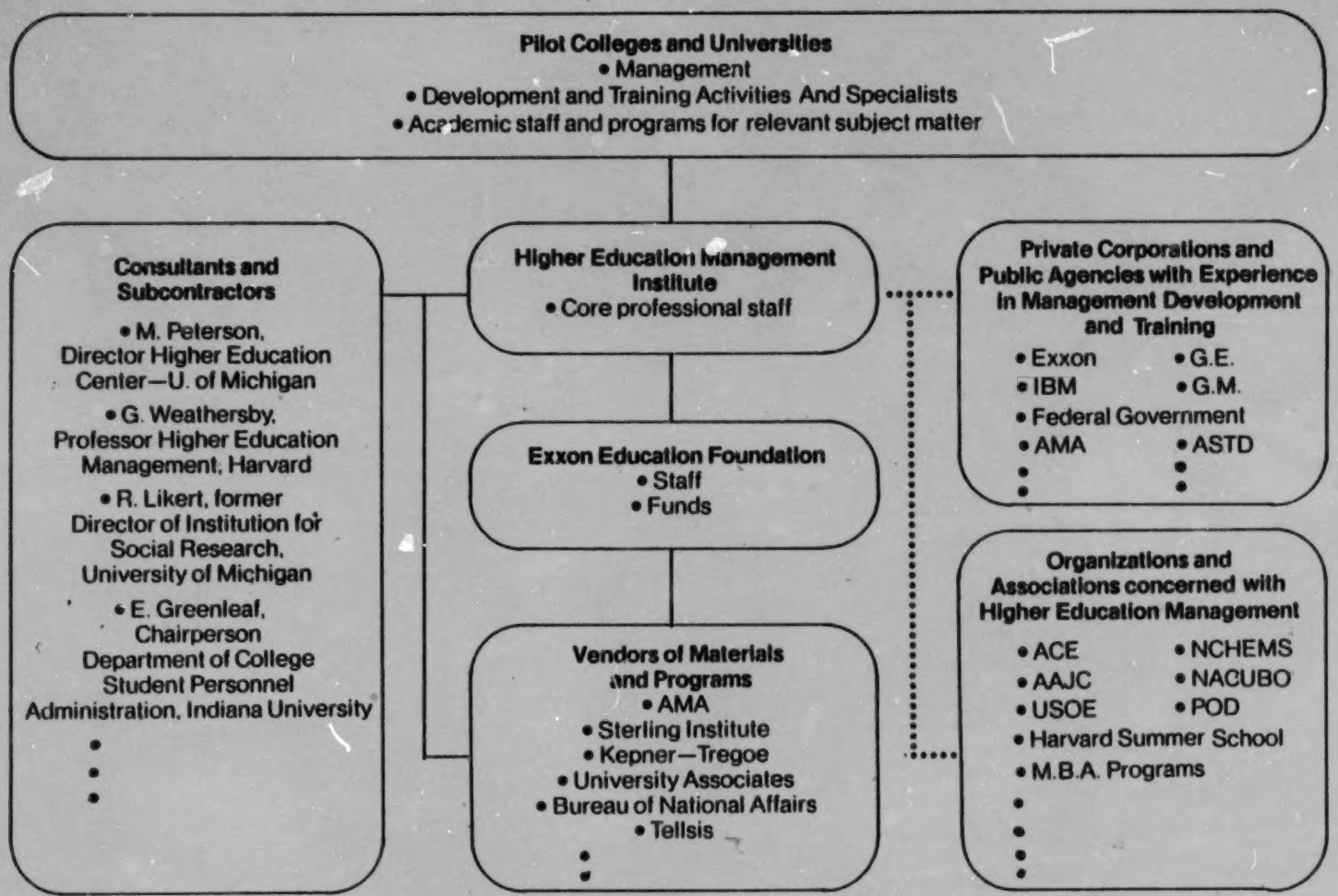

Pilot Colleges and Universities
• Management
• Development and Training Activities And Specialists
• Academic staff and programs for relevant subject matter
Consultants and Subcontractors
• M. Peterson, Director Higher Education Center—U. of Michigan
• G. Weathersby, Professor Higher Education Management, Harvard
• R. Likert, former Director of Institution for Social Research, University of Michigan
• E. Greenleaf, Chairperson Department of College Student Personnel Administration, Indiana University
Higher Education Management Institute
• Core professional staff
Exxon Education Foundation
• Staff
• Funds
Vendors of Materials and Programs
• AMA
• Sterling Institute
• Kepner—Tregoe
• University Associates
• Bureau of National Affairs
• Tellsis
Private Corporations and Public Agencies with Experience in Management Development and Training
• Exxon
• G.E.
• IBM
• G.M.
• Federal Government
• AMA
• ASTD
Organizations and Associations concerned with Higher Education Management
• ACE
• NCHEMS
• AAJC
• NACUBO
• USOE
• POD
• Harvard Summer School
• M.B.A. Programs

Figure 1

2.2 Exxon Education Foundation

The Foundation staff, in addition to its most important contribution of the funds required to support this entire undertaking, has also contributed logistical support to various activities, including meetings and mailings. Furthermore, their broad contact with various parts of the higher education community serves as a means of testing out our ideas, both for substance and acceptability.

2.3 Consultants and Subcontractors

A number of individuals and firms have been and will be used on various aspects of the project where their expertise is, in the opinion of the Institute, the most cost/effective. The working papers listed in Attachment A will provide the reader with a more detailed idea of what has currently been completed. Rensis Likert Associates, Inc., the firm which was created by Professor Likert for the implementation of the ideas that he first developed at the Institute for Social Research at the University of Michigan, is currently under contract to work with the Institute in the development of the Needs Assessment instruments and analysis that are described in more detail in Section 8 of this report.

2.4 Private Corporations and Public Agencies with Experience in Management Development and Training

A number of corporations and organizations have been consulted with regard to the experiences that they have had in carrying out management development and training programs within their organizations. The directors of these programs, all of whom have in essence been functioning as unpaid advisors to the project, have given us the benefit of their wealth of experience, both with regard to how one develops and implements the program from a managerial point of view, as well as the impact of various training materials and methodologies. We hope to continue to benefit from their advice and greatly appreciate their time, effort, and the sample materials which have been provided to the Institute.

2.5 Organizations and Associations Concerned with Higher Education Management

There are a large number of organizations and associations that are concerned either directly or indirectly with improving the quality of higher education management. We have established initial contacts with most of these organizations in order to receive their counsel on how best to carry out the project. It is our intention to stay in contact with these organizations, to make sure they are informed fully on the project, and to provide a variety of opportunities for representatives of the organizations to comment on the project. Individual meetings, telephone calls and correspondence have been used so far. It is our intention to make this slightly more formal by holding a workshop in Washington, D.C., during January, 1977, to which representatives of these organizations will be invited. (See Figure 2).

2.6 Vendors of Materials and Programs

As detailed in Section 9 of this report, there is a wealth of currently available materials and programs produced by both profit and non-profit organizations. There are many factors to be evaluated with regard to their usefulness to the project. It is our intention to create as little as possible and, wherever possible, to use existing materials to meet the needs of colleges and universities. A thorough evaluation of these materials and programs is being undertaken and will continue. When needs are identified, for which specific training programs and materials are required, we will follow the philosophy of looking for the most cost/effective subcontracting or consultative source to produce them. In many cases this may involve the colleges and universities themselves, and non-profit or commercial vendors. We are not establishing the Institute in any way in a competitive position with suppliers of materials, but rather providing a channel through which they can offer the best and most useful of their services and materials to the higher education community as a whole.

Organizations Concerned with Higher Education Management

1. AAC - Association of American Colleges
2. AACJC - American Association of Community & Junior Colleges
3. AAHE - American Association for Higher Education
4. AASCU - American Association of State Colleges & Universities
5. AAU - Association of American Universities
6. AAUA - American Association of University Administrators
7. ACCT - Association of Community College Trustees
8. ACE - American Council on Education
9. ACT - American College Testing Program
10. AGB - Association of Governing Boards of Universities and Colleges
11. AIR - Association for Institutional Research
12. AMA - American Management Associations
13. APGA - American Personnel & Guidance Association
14. ASHE - Association for the Study of Higher Education
15. ASTD - American Society for Training & Development
16. CASC - Council for the Advancement of Small Colleges
17. CASE - Council for the Advancement and Support of Education
18. CAUSE - College & University Systems Exchange
19. CIL - Council for Inter-Institutional Leadership (consortium association)
20. CUPA - College & University Personnel Association
21. ECS - Education Commission of the States
22. ISE/TACTICS - Institute for Services to Education
    (Technical assistance consortium)
23. ETS - Educational Testing Service
24. NACAC - National Association of College Admissions Counselors
25. NACUBO - National Association of College & University Business Officials
26. NASPA - National Association of Student Personnel Administrators
27. NASULGC - National Association of State Universities & Land Grant Colleges
28. NCHEMS - National Center for Higher Education Management Systems
29. NCURA - National Council of University Research Administrators
30. NEXUS
31. POD - Professional and Organizational Network in Higher Education
32. SCUP - Society for College and University Planning
33. SHEEO - State Higher Education Executive Officers
34. USOE - United States Office of Education
    - AIDP - Advanced Institutional Development Program
    - ERIC - Education Resource Information Centers
    - HEGIS - Higher Education General Information Survey
    - NIE - National Institute of Education
    - PED - Planning and Evaluation Division
35. Regional Accrediting Agencies: NCA, SACS, MSA
36. Interstate Compacts: WICHE, SREB

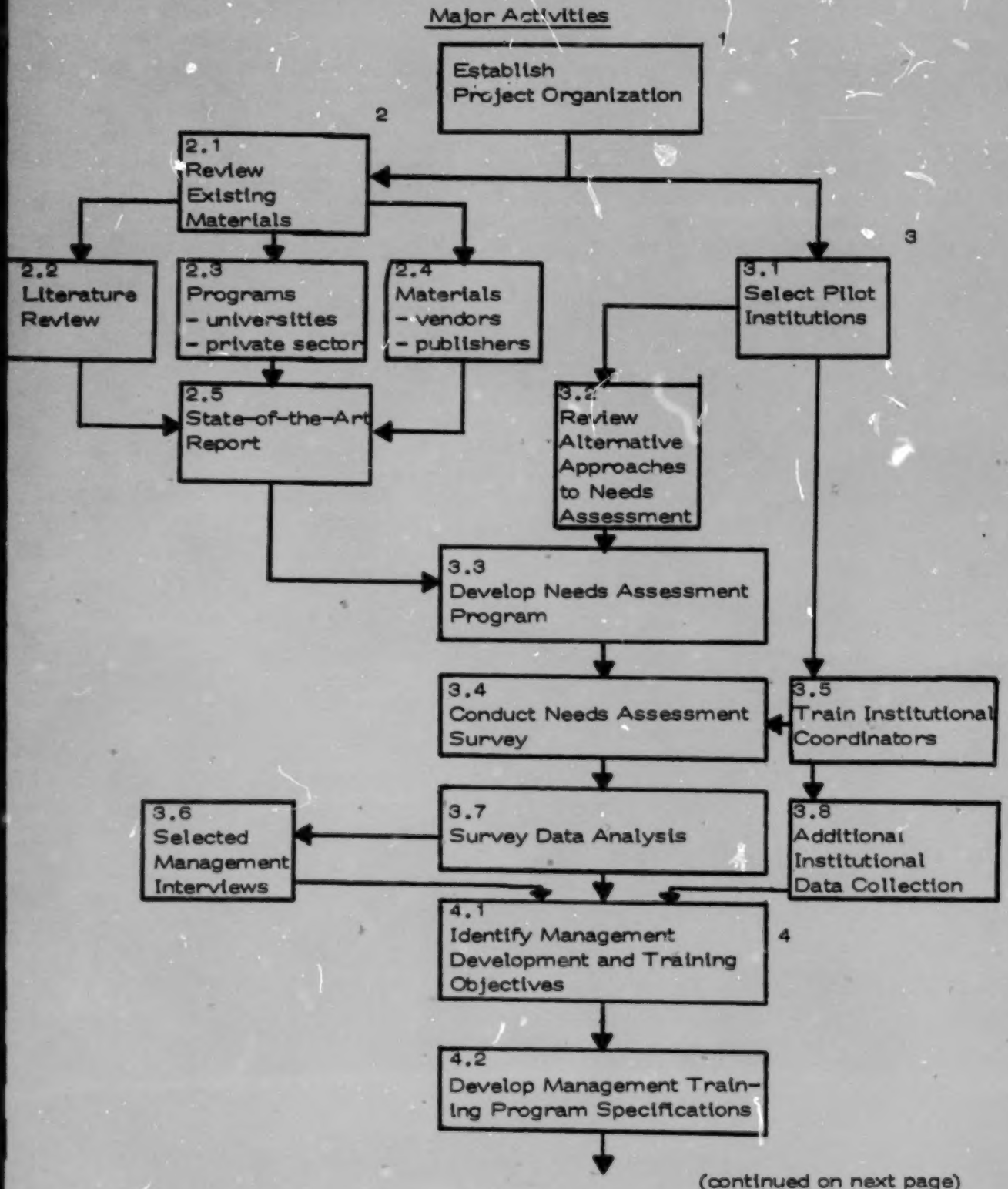
3. MAJOR PROJECT ACTIVITIES, THEIR CURRENT STATUS AND PROJECTED COMPLETION DATES

Figure 3 displays the major project activities. Activities 1, 2, and the first half of 3, have been substantially completed. Various sections of this report describe those activities that have been completed or substantially completed since Progress Report #1. Activity 3.1 is described in Section 5. Activities 2.1, 2.2, 2.3, 2.4 and 2.5 are discussed in Section 7. Section 8 reviews the results of Activities 3.2, 3.3, as well as describing the intended approach to be used in Activities 3.4 through 3.8. Section 9 provides some initial thoughts with regard to parts of Activities 7 and 10.

During the remainder of 1976 and the first quarter of 1977, Activities 2 and 3 will be completed. Activities 4, 5, 6, 7 and 8 will begin during the same time period and extend through the second quarter of 1977. Activity 8 will most likely begin in the third quarter of 1977. We believe that all of the activities in the pilot project will be substantially completed by the end of 1978.

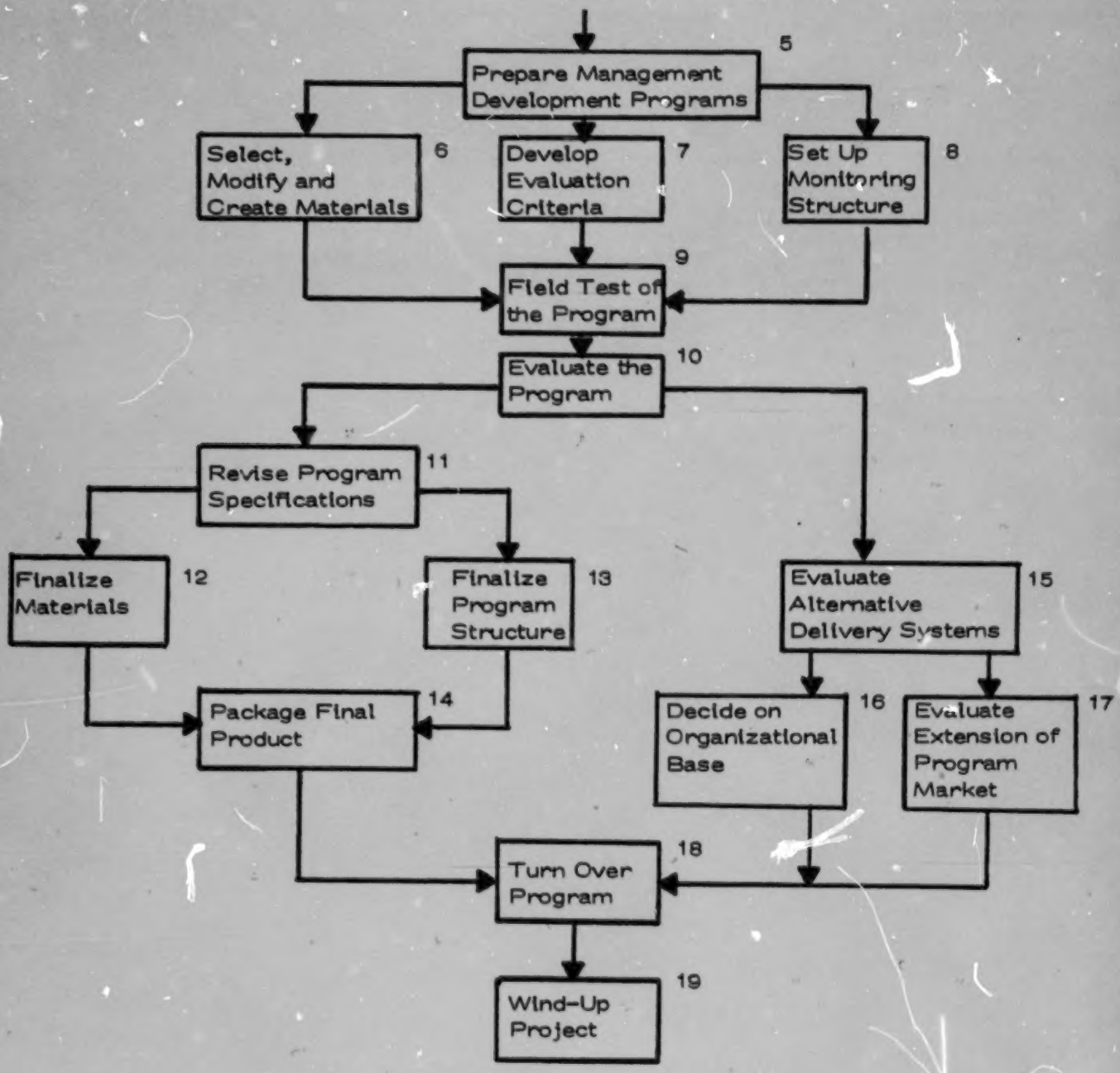
Figure 3

MANAGEMENT DEVELOPMENT AND TRAINING PROGRAM
FOR COLLEGES AND UNIVERSITIES


Major Activities
1
Establish Project Organization
2
2.1 Review Existing Materials
2.2 Literature Review
2.3 Programs - universities - private sector
2.4 Materials - vendors - publishers
2.5 State-of-the-Art Report
3
3.1 Select Pilot Institutions
3.2 Review Alternative Approaches to Needs Assessment
3.3 Develop Needs Assessment Program
3.4 Conduct Needs Assessment Survey
3.5 Train Institutional Coordinators
3.6 Selected Management Interviews
3.7 Survey Data Analysis
3.8 Additional Institutional Data Collection
4
4.1 Identify Management Development and Training Objectives
4.2 Develop Management Training Program Specifications

(continued on next page)

Figure 3 (Cont'd)



4. A DESCRIPTION OF THE MANAGEMENT DEVELOPMENT AND TRAINING PROGRAM

Figure 4 is our current conceptualization of the overall program structure and its major phases. The five major program phases, then, are:

PHASE I: INTRODUCTION

The introduction to the program will typically include an initial exposure to the Program from either Institute literature or seminars followed by a discussion of the key concepts with the top management of the college or university. Based on an assessment of the institution's commitment and readiness to undertake a major development and training program, and on descriptive material on the program, the institution will make a decision on whether or not to participate in the program. Actual program participation starts with an orientation meeting for the coordinator and the senior managers of the institution.

PHASE II: NEEDS ASSESSMENT

The second phase of the program consists of an assessment of management development and training needs. An initial assessment of needs is prepared by administering a series of survey questionnaires to the trustees, management, faculty, staff and students. After the survey data has been processed and initial results have been produced, selective interviews may be conducted with managers at the college or university in order to gain a better understanding of the needs indicated by the survey. At this time, it may also be useful to collect additional data related to various management practices within the institution.

Survey and other data collected will be analyzed and the results will be reported to the institution and thoroughly discussed. On the basis of the data and discussions with senior management personnel, specific management development and training needs will be identified for each institution, and for constituent units where the data make that possible. These needs will be identified in a report to the institution from the Higher Education Management Institute.

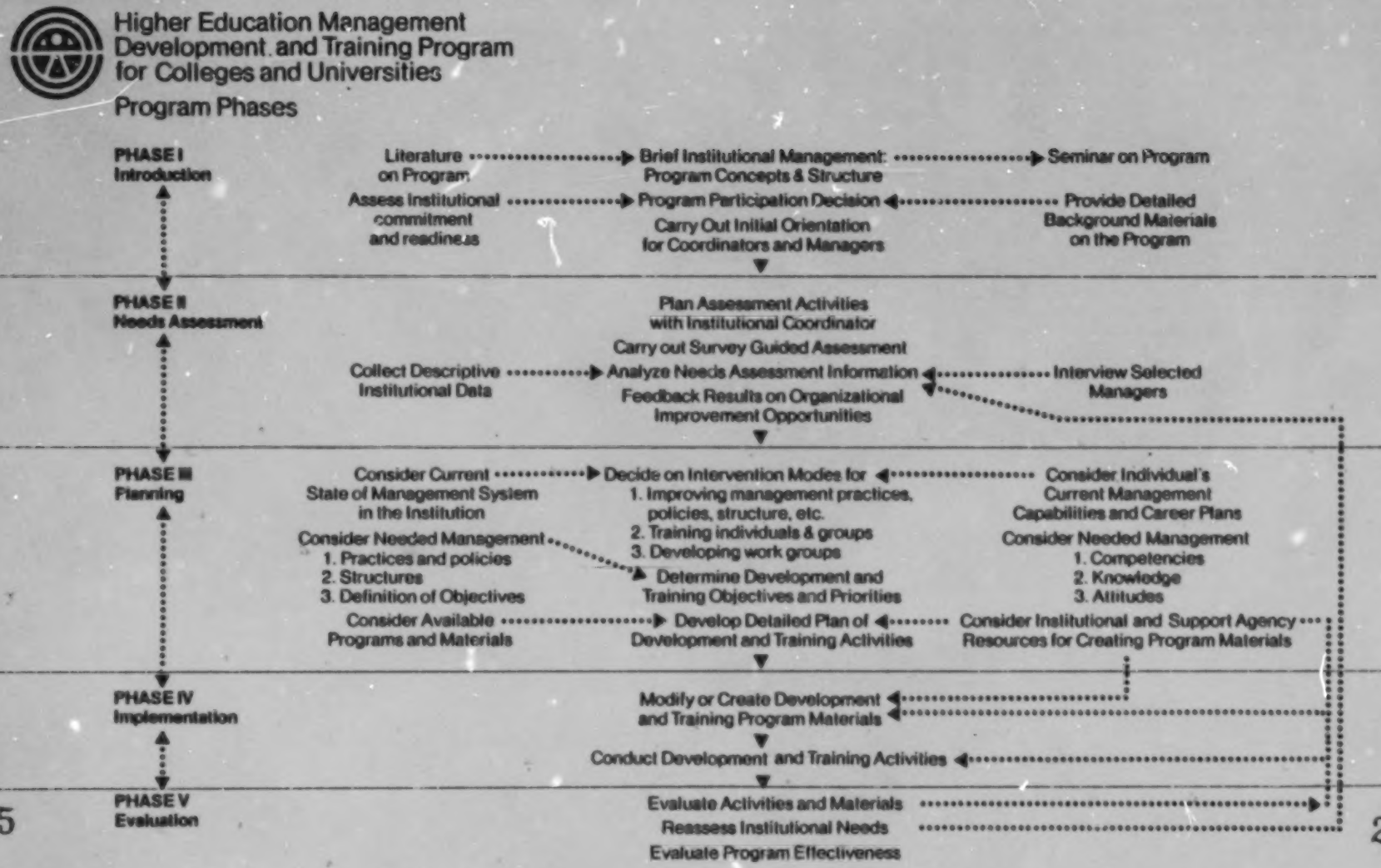

Higher Education Management Development and Training Program for Colleges and Universities
Program Phases
PHASE I Introduction
Literature on Program
Brief Institutional Management: Program Concepts & Structure
Seminar on Program
Assess Institutional commitment and readiness
Program Participation Decision
Provide Detailed Background Materials on the Program
Carry Out Initial Orientation for Coordinators and Managers
PHASE II Needs Assessment
Plan Assessment Activities with Institutional Coordinator
Carry out Survey Guided Assessment
Collect Descriptive Institutional Data
Analyze Needs Assessment Information
Interview Selected Managers
Feedback Results on Organizational Improvement Opportunities
PHASE III Planning
Consider Current State of Management System in the Institution
Decide on Intervention Modes for
1. Improving management practices, policies, structure, etc.
2. Training individuals & groups
3. Developing work groups
Consider Individual's Current Management Capabilities and Career Plans
Consider Needed Management
1. Practices and policies
2. Structures
3. Definition of Objectives
Determine Development and Training Objectives and Priorities
Consider Needed Management
1. Competencies
2. Knowledge
3. Attitudes
Consider Available Programs and Materials
Develop Detailed Plan of Development and Training Activities
Consider Institutional and Support Agency Resources for Creating Program Materials
PHASE IV Implementation
Modify or Create Development and Training Program Materials
Conduct Development and Training Activities
PHASE V Evaluation
Evaluate Activities and Materials
Reassess Institutional Needs
Evaluate Program Effectiveness

Figure 4

PHASE III: PLANNING

The third phase of the program involves the development of detailed training objectives, taking into account the management development and training needs as well as the current capabilities and career plans of individuals that will be participating in the training program. The training needs of individuals as well as the systemic processes that may have to be improved will be considered. The improvement of individual functioning within work groups will be viewed in terms of training needs aimed at improving knowledge, skills and attitudes. Plans for acquiring, modifying or creating materials to be used in the Program will all be carried out.

PHASE IV: IMPLEMENTATION

Phase IV consists of the preparation of the materials needed and delivery of the overall program itself.

Wherever possible, existing procedures and materials will be modified to meet the needs that have been identified. Where necessary, new procedures and materials will be developed by the college or university, the Higher Education Management Institute, or identified consultants. Once a set of training activities have been agreed upon by the college or university and the Institute, the training programs will be conducted by a combination of Institute staff, consultants, as well as resource personnel available from within each participating college or university.

PHASE V: EVALUATION

Phase V is aimed at evaluating the effectiveness of the individual development and training activities, as well as the programs as a whole. This is to be accomplished through evaluations by the participants in each training activity, as well as reassessment of institution needs, by once again conducting the same survey of trustees, management, staff, faculty and students. In this way it should be possible to identify quantitatively any changes that have occurred in the management practices as well as institutional outcomes. On the basis of this evaluation, the program as a whole or the individual activities will be modified.

Each of these phases will have a variety of "products" associated with it. These will include manuals to guide the institution and, wherever possible, supplementary materials such as forms, tapes, slides and booklets.

Figure 5 describes the activities that need to be performed in support of an institution's program. Initially, the Higher Education Management Institute will perform these functions. As the program develops, several changes may take place. Where colleges and universities are large enough, some of these activities may be brought in-house. For state supported institutions, central state coordinating agencies may decide, for economic or other reasons, to take on some of these functions. Another alternative may involve institutions deciding individually or collectively, perhaps using an existing consortium or organization, to deal with institutions in a particular geographic area, or of a particular type. It is the intent of Higher Education Management Institute to explore all of these possibilities and to develop mechanisms for assisting organizations in assuming these roles as the project evolves. Some central coordination, in order to ensure consistency, quality and exchange of information, will undoubtedly need to continue. The exact functions, their form, and the means of cooperative effort, will evolve as the project continues.

Figure 5

Management Development and Training Program for Colleges and Universities

INSTITUTIONAL SUPPORT ACTIVITIES

1. Provide on-site assistance for Program

   - Introduction
   - Needs Assessment
   - Planning
   - Implementation
   - Evaluation
   - Special problems

2. Process Information and Maintain Computer as well as Hard Copy Based Data Banks on

   - Needs Assessment Surveys
   - Development and training materials
   - Vendors and sources, including evaluations by users
   - Program participants' activity records
   - Available consultants for on-site assistance from other participating institutions

3. Monitor State-of-the-Art of

   - Assessment techniques
   - Higher education management
   - Management concepts and techniques
   - Management development and training concepts and techniques

4. Adapt Development and Training Materials

5. Review, Evaluate and Modify Program

6. Produce:

   - User's Manuals and associated materials
   - Bulletins
   - Special reports

7. Liaise with Associations and Organizations Concerned with Management Development and Training

5. SELECTION OF THE PILOT INSTITUTIONS

Figure 6 describes the procedure used and the number of institutions involved in each part of the selection process. Attachment B contains a complete listing of all the institutions that submitted a proposal. Attachment C is a copy of the letter sent out from Dr. Bolman inviting institutions to submit proposals. The "proposals" ranged in size from one page to hundreds of pages. Some 80% of the proposals came in over the signature of the president.

We recognize that a selection process such as this is imperfect. However, we believe that the procedure treated each situation consistently. It should be noted that the criteria used to select the pilot institutions were not intended to produce a representative group of institutions. They were quite to the contrary, and insofar as the Institute was able to determine, biased toward those institutions with the strongest commitment to management improvement in general and management training in particular.

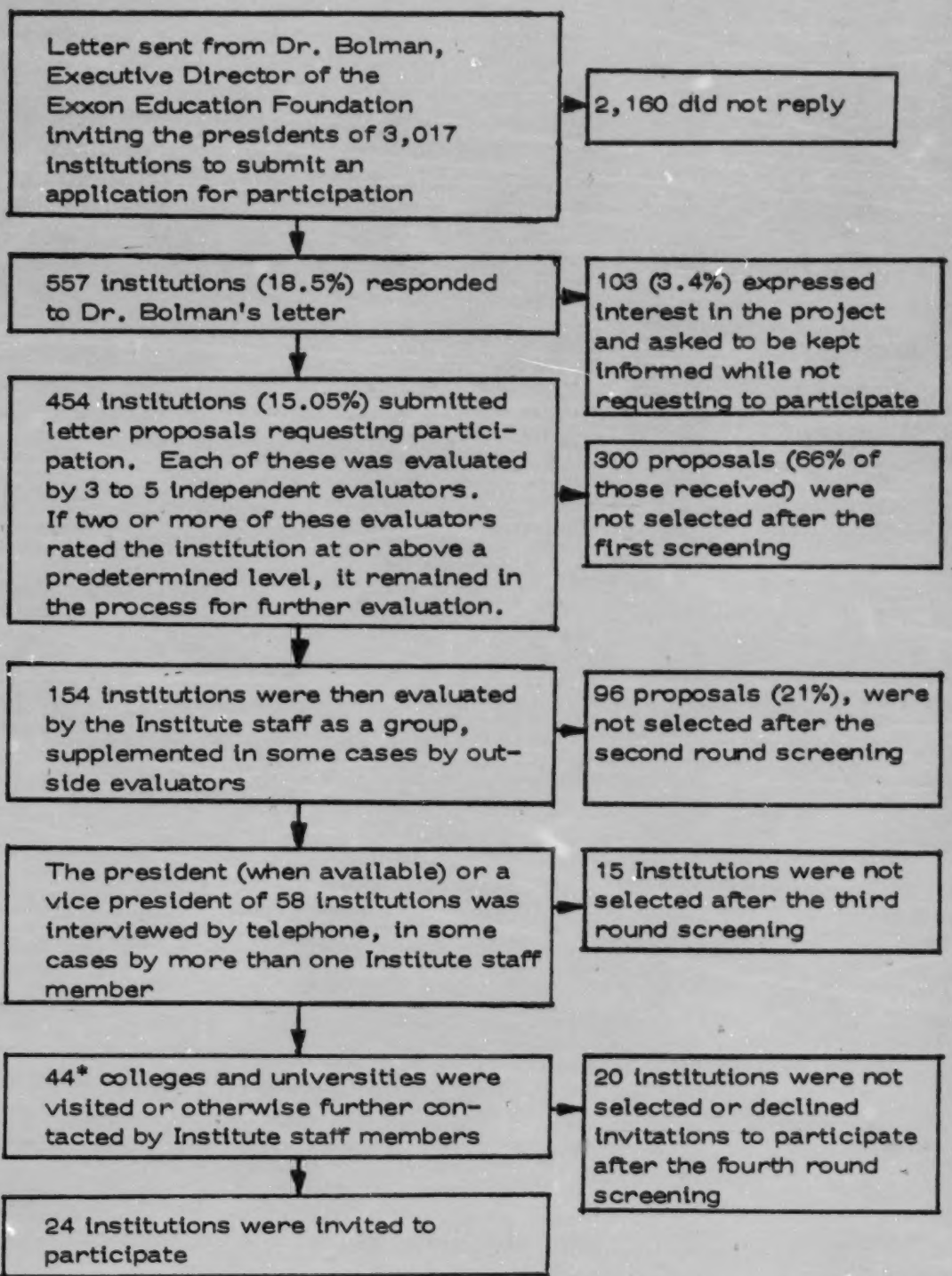
We therefore believe that all of the institutions invited to participate are committed to management development and training as a means of improving their efficiency and effectiveness.

Beyond these basic criteria we attempted to achieve some representativeness with regard to:

- control - publicly controlled colleges and universities, privately controlled colleges and universities and community colleges.
- student enrollment.
- setting - urban, suburban and rural.
- financial condition.
- current status of organizational development and training activities.
- geographic location.
- organizational complexity.

Figure 6

THE SELECTION OF PILOT INSTITUTIONS


Letter sent from Dr. Bolman, Executive Director of the Exxon Education Foundation inviting the presidents of 3,017 institutions to submit an application for participation
2,160 did not reply
557 institutions (18.5%) responded to Dr. Bolman's letter
103 (3.4%) expressed interest in the project and asked to be kept informed while not requesting to participate
454 institutions (15.05%) submitted letter proposals requesting participation. Each of these was evaluated by 3 to 5 independent evaluators. If two or more of these evaluators rated the institution at or above a predetermined level, it remained in the process for further evaluation.
300 proposals (66% of those received) were not selected after the first screening
154 institutions were then evaluated by the Institute staff as a group, supplemented in some cases by outside evaluators
96 proposals (21%), were not selected after the second round screening
The president (when available) or a vice president of 58 institutions was interviewed by telephone, in some cases by more than one Institute staff member
15 Institutions were not selected after the third round screening
44* colleges and universities were visited or otherwise further contacted by Institute staff members
20 institutions were not selected or declined invitations to participate after the fourth round screening
24 institutions were invited to participate

*One institution that did not apply directly was invited to apply because of the exceptional nature of their management development activities.

The 24 institutions that have been invited to participate are shown in Figure 7.

We are pleased to be able to work with such a fine group of institutions and are confident that not only will we be able to be of significant assistance to them in launching their management and training programs, but that they in turn will provide valuable input in helping to shape the program that results from this project.

Higher Education Management
Development and Training Program
for Colleges and Universities

Pilot Institutions
October 15, 1976

● Publically Controlled Colleges & Universities

1. Ball State U.—IN (17,000)
2. Kansas State U.—KS (18,000)
3. Ohio U.—OH (18,000)
4. Rutgers U.—NJ (45,000)
5. State U. of NY at Buffalo—NY (27,000)
6. U. of California at Irvine—CA (10,300)
7. U. of Tennessee—TN (28,000)

◆ Privately Controlled Colleges & Universities

1. Antioch College—OH (7,200)
2. Barry College—FL (1,700)
3. Boston College—MA (12,000)
4. Cornell U.—NY (18,000)
5. Elon College—NC (2,200)
6. Loyola College —MD (4,600)
7. Mass. Inst. of Tech.—MA (8,200)
8. Trinity College—CT (1,700)
9. Tuskegee Institute—AL (3,500)

▲ Publically & Privately Controlled 2 Year Institutions

1. Central YMCA C.C.—IL (5,200)
2. C.C. of Alleghany Co.—PA (42,000)
3. C.C. of Denver—CO (6,500)
4. College of Lake Co.—IL (9,500)
5. Dallas C.C.—TX (32,000)
6. J. Sargent Reynolds C.C.—VA (12,000)
7. Los Rios C.C. at Sacramento—CA (18,500)
8. New York City C.C.—NY (17,000)

Figure 7

25

6. AN ESTIMATE OF THE POTENTIAL NUMBER OF PARTICIPANTS IN A MANAGEMENT DEVELOPMENT AND TRAINING PROGRAM FOR COLLEGES AND UNIVERSITIES

The response to Dr. Bolman's letter seems to indicate a high degree of interest and willingness on the part of colleges and universities to participate in a management development and training program, if one were available which was designed to meet their particular needs. Based on United States Office of Education statistics and our own supplementary research, Figure 8 is an estimate of the middle and upper level managers that could potentially participate in the program throughout the country.

As best we can estimate, roughly one-third of these individuals reside in each of the three major categories of institutions that we have represented in our project: publicly controlled colleges and universities; privately controlled colleges; and publicly and privately controlled two-year institutions. The annual turnover rate is perhaps the most difficult statistic to determine, and we believe that the numbers we are using somewhat overestimate the turnover in certain categories. The United States Office of Education produces that statistic by asking whether or not you are new in your position. Thus, if you are new in the position because it is the first time the position has existed, your answer will tend to produce an overestimate of the turnover rate. Taking this and job switching into account, we estimate that the annual inflow to a first or significantly different management position is approximately 10,000 individuals per year. This would mean that the overall program has an initial market of approximately 100,000 individuals and 10,000 new individuals each year.

In order for the program that the Institute is developing to be successful, it must not only be useful in fact, but also acceptable to the higher education community. Certainly demonstrated success in the pilot institutions is most important in achieving these objectives, but we also believe it is important to encourage the cooperation and assistance of the various higher education associations that are concerned with management. It is for this reason we are establishing contacts with all of the organizations listed on Figure 2 to invite representatives from their organizations to a presentation on the project in Washington, D.C., in January, 1977.

Figure 8

Higher Education Management Institute

Estimate of Middle and Upper Level Managers

	Number	Annual Turnover
President or Chancellor	3,100	13%
Assistant to the President or Chancellor	650	9%
Senior Academic Managers (Deans, V.P., etc.)	11,700	15%
Financial Managers	8,100	12%
Student Services Managers	11,100	14%
Department or Division Chairpersons	66,600	20%
*Chairpersons of Management Committees (not included above)		
State Coordinating Agency Managers	700	15%
TOTAL	101,950	18%

Estimated annual turnover: 18,000

Estimated annual inflow to a first or significantly different management position: 10,000

*No estimate available at present

Program cost is another extremely important factor, critically affecting the ultimate number of institutions and individuals that this program will service. This is a very important topic, but one on which we do not have much to say at present. In subsequent progress reports we will begin to suggest alternative pricing, financing and organizational strategies for continuing the program beyong the pilot institutions at cost effective levels. While the exact costs have yet to be determined, the fact that the Exxon Education Foundation is bearing the start-up and initial development costs, means that subsequent participants as well as the pilot institutions will benefit.

7. THE STATE-OF-THE-ART OF MANAGEMENT DEVELOPMENT AND TRAINING AND A MODEL FOR THESE ACTIVITIES IN COLLEGES AND UNIVERSITIES

7.1 Introduction

In order to develop a comprehensive knowledge base for the Management Development and Training Program for Colleges and Universities, the Higher Education Management Institute undertook a comprehensive review of the state-of-the-art. In particular, it conducted the following activities:

1) A review was undertaken of current approaches to management development and training in higher education. These approaches were compared with approaches taken in the private sector;

2) Over 200 publishers and vendors of management development and training program materials were invited to submit materials that, in their opinion, might be applicable to higher education management. This resulted in the accumulation of a great number of vendor catalogs and, in some cases, training materials. The evaluation of these materials is continuing;

3) Comprehensive literature searches on higher education management development and training needs and programs were commissioned, focusing attention on academic affairs, business affairs and student affairs management positions;

4) A general review was undertaken of the literature on theories of organization functioning and human effectiveness.

On the following pages, the results of these activities are reported to the extent that they are currently available.

7.2 Approaches Now Used for Management Development and Training

In their study of higher education, Dressel and Mayhew (1974) listed 67 universities offering programs leading to the Ed.D. or Ph.D. degree in higher education. They estimated that in 1974 the enrollment in doctoral programs in higher education was about 4,100.

The Institute took a closer look at a small sample of these programs and, while all of these programs expressed a concern for the continuing education of higher education executives, there was no apparent programmatic relationship between the graduate degree programs and the school's continuing education unit or the consulting activities of individual faculty members. The program catalogs and descriptive materials received from the institutions did not reveal any courses in management development and training or that deal at the identifiable level with the development responsibilities and obligations of future executives. Furthermore, many of the courses offered tended to be descriptive or provide historical perspectives while only a few courses at the graduate level concentrated on the management of higher education per se. Graduate programs in higher education do not now directly serve the management development and training needs of large numbers of college and university managers.

It also appears that colleges and universities have very little in the way of in-service programs for management development. While the Institute has been able to identify about a dozen colleges and universities that do have full time people assigned to the task of management development, discussions with these people brought out the fact that most of their efforts were concentrated in the non-academic area.

When the Institute staff visited with individuals responsible for corporate training at Exxon, General Electric, General Motors, IBM and Xerox, they found, in complete contrast with higher education, very extensive programs aimed at the management development and training of people in management positions in these corporations. Each of the companies has developed extensive programs and materials for the development and training of their own employees. There is clearly a well-established management development and training ethic in major corporations.

The initial review of current approaches to management development and training indicated that there was little available in the way of on-the-job management development and training programs with a high degree of flexibility and adaptability to meet the needs of administrators usually promoted from within the academic ranks with little or no formal management training.

7.3 Review of Available Programs and Materials

At the same time that the Institute was reviewing approaches now used for management development and training by colleges and universities as well as major private corporations, letters were sent out to approximately 200 publishers and vendors of management development and training programs and materials. Figure 9 provides an overview of the estimated value and status of information resources to the management development and training program for colleges and universities.

The evaluation of the materials is continuing. In each case, the following type of questions are being asked:

- Is the subject matter directly applicable to higher education?
- Is the material of sufficient depth for higher education?
- Is the suggested delivery method for the training program appropriate for the highly educated and extremely busy managers of higher education institutions?
- Can the material be presented without the direct involvement of specialized personnel?

All those materials that pass the first step evaluation process are grouped into three major categories:

1) Material that may be used directly without modification in higher education.
2) Material that, although not conceived for higher education, will undoubtedly be pertinent.
3) Material that is not directly applicable to higher education but the concepts represented in the material may be.

The materials to be developed for the Management Development and Training Program for colleges and universities that is being developed by the Higher Education Management Institute will draw upon several sources:

1) Proprietary sources
2) Consultants on contract to the Higher Education Management Institute

Figure 9

Management Development and Training Programs with Possible Application to Higher Education: Estimated Value and Status of Information Resources

Sources and Types of Programs	Types of Program Information: Research Literature	Prof'al. Literature	Internal Reports	Desc'ptive. Literature	Program Managers	Instr'al. Materials
Business & Industry						
1. In-service	(H/L)	M/L	H/L-M	M/M-H	(H/M)	(H/L)
2. Conferences & Seminars	L/O	L/O	M/O	L/L	L-M/M	(M/L)
Colleges & Universities						
3. In-service	L/H	L/H	(H/L)	(L-M/H)	(H/M)	(H/O-L)
4. Conferences & Seminars	L/H	L/H	L-M/L	L/L	M/L	(M/O-L)
Government						
5. In-service	L/L	(L-M/L)	M/M	M/L	(M-H/L-M)	(M-H/L)
6. Conferences & Seminars	L/L	L-M/L	L/L	L/L	L-M/L	(M/L)
7. Graduate Degree Programs	L/H	L/H	L-M/M	L/M	(H/M)	(L-M/L)
Graduate Programs						
8. In-service	L/H	L/H	(L-M/O)	L-M/L	(M/L)	(M-H/L)
9. Conferences & Seminars	L/H	L/H	L/L	L/M	L-M/L	L-M/L
10. Professional Associations	L/H	L/H	(L-M/L)	M/M	(M-H/M)	(M-H/L)
11. Professional Consultants	(L-M/L)	L-M/L-M	(H/L)	L-M/M	(H/L)	(H/L)
Vendors						
12. In-service	L/H	L/H	(H/O-L)	L/H	(M/L)	(M/L)
13. Conferences & Seminars	L/H	L/H	(H/O-L)	L/H	(M/L)	(M/L)

Legend: High, Medium, Low, O-None. Letter(s) before the slash (/): estimated value of information from the source. Letter(s) following the slash (/): status of HEMI's work on each type of information. Parentheses: (Priority area for continuing work).

3) Academic personnel from participating or other colleges and universities

4) Material adapted from major corporations

5) Material developed by the Institute itself

7.4 Management Development in Higher Education

Literature searches conducted for the Institute by graduate research assistants at Indiana University and the University of Michigan, have identified some consistent patterns across the three major divisions in colleges and universities. They are:

1) The higher education research literature rarely deals with management and training. Five graduate research assistants found only about 600 citations over the past ten years related in any way to management development and training of higher education. The great majority of these were doctoral dissertation studies on limited population, making comparisons difficult.

2) The great majority of these research studies described position tasks or responsibilities. Efforts to convert these position elements into skill or competency groupings as a basis for defining training program content are all but non-existent.

3) The journal literature in higher education has almost no research citations on management development and training, and few related articles other than reports of individual experience and opinion.

4) No research studies were reported which took an organization-wide look at management positions. Research has yet to relate management positions skills or competencies to the organizational setting.

5) Evaluation of training programs in higher education is almost always in terms of trainee satisfaction with the program. No instances of training program evaluation by measuring changes in performance or output were reported.

6) Reports of the work done by training managers and their staffs in colleges and universities seemed rarely to move from internal reports and other fugitive sources to the higher educational journal literature or to the educational resources information dissemination system.

This situation imposes the dual penalty of depriving higher education managers, professors and students from learning about this important area and also preventing them from contributing to improving the state-of-the-art in management development and training.

7.5 Theories of Organizational Functioning

The paucity of the literature dealing with higher education management led the Institute to a review of basic literature on theories of organizational functioning and human effectiveness. Figure 10 provides a cryptic overview of major theories of organizational functioning and human effectiveness. The Institute recognizes that these theories have been predominantly developed on the basis of experience in private business organizations. However, the Institute also believes that to the extent that management is a generic function of human organizations, lessons learned from research in other areas can benefit colleges and universities.

The opposite view, that business organization management is not fully transferable to colleges and universities (Millet, 1975) has been considered. It is agreed that specific management strategies cannot always be transferred one for one to colleges and universities. However, the underlying assumptions of organizations as complex social systems are considered useful and applicable.

While the theories summarized in Figure 10 are all based on a very common philosophic approach to management, it should be noted that not everyone agrees with their point of view. David C. McClelland is a key proponent of a philosophy of management that is significantly different from those of Likert and others included on Figure 10.

The attraction of these approaches to organizational functioning is that they do present a model for management development and training for individual organizations. In particular, the Institute believes that the survey-guided development approach to management development training developed by Rensis Likert and his colleagues at the Institute for Social Research, the University of Michigan, and Rensis Likert Associates, Inc., provides a viable approach for colleges and universities.

Figure 10

THEORIES OF ORGANIZATIONAL FUNCTIONING
AND HUMAN EFFECTIVENESS

RENSIS LIKERT	SYSTEM 1 COERCIVE	SYSTEM 2 COMPETITIVE	SYSTEM 3 CONSULTATIVE	SYSTEM 4 COLLABORATIVE
CHRIS ARGYRIS	AUTOCRATIC RELATIOSHIPS CONFLICT & CONFORMITY	MANIPULATIVE RELATIONSHIPS	AUTHENTIC RELATIONSHIPS INTERPERSONAL COMPETENCE	
WARREN BENNIS	BUREAUCRACY AUTHORITATIAN, RESTRICTIVE MANAGEMENT STRUCTURE		DEMOCRACY GOAL-ORIENTED, ADAPTIVE MANAGEMENT STRUCTURE	
ROBERT BLAKE	1,1 NEUTRALITY & INDECISION	1,9 UNBALANCED CONCERN FOR PEOPLE OR PRODUCTION	9,1 5,5 COMPROMISE MIDDLE-OF-THE-ROAD	9,9 INTEGRATION OF RESOURCES
ERICH FROMM	ESCAPE FROM FREEDOM CONFORMITY, MANIPULATION. DESTRUCTIVENESS		FREEDOM SPONTANEOUS AND RESPONSIBLE BEHAVIOR	
WILLIAM GLASSER	IRRESPONSIBLE BEHAVIOR AVOIDANCE OF REALITY		RESPONSIBLE BEHAVIOR COPING WITH REALITY	
FREDERICK HERZBERG	MEANINGLESS WORK ◄—HYGIENE SEEKING		MEANINGFUL WORK MOTIVATION SEEKING—►	
ABRAHAM MASLOW	LOWER-NEED FIXATION HALTED GROWTH		SELF-ACTUALIZATION (EUPSYCHIA) REALIZED POTENTIAL	
DOUGLAS MCGREGOR	THEORY X REDUCTIVE	TRADITIONAL	THEORY Y DEVELOPMENTAL	
TEXAS INSTRU-MENTS	AUTHORITY ORIENTATION INTERPERSONAL CONFLICT, MEANINGLESS GOALS, RESTRICTIVE SYSTEMS		GOAL ORIENTATION INTERPERSONAL COMPETENCE, MEANINGFUL GOALS, HELPFUL SYSTEMS	
KATZ & KAHN	Social-psychological interrelationships among individuals-organizations-environment. Specialized organizational sub-systems; permeable organizational boundaries; dynamic interactions with a complex environment.			

Source: Adapted from Scott Myers, "Interdisciplinary Research and Action," 1967.

Figure 11 provides a systemic framework for viewing the individual manager in a college or university. For management development and training programs to succeed, they must take into account a complex set of factors that influence the behavior of individual managers in a college or university. These factors include personal characteristics, as well as prior experience, the management structure imposed upon the institution either by itself or by various control systems, the unique objectives and and programs that are being pursued by colleges and universities and the social and economic conditions of our time.

Section 8 of this report expands on the rationale behind the Institute's adoption of the survey-guided development approach, using Likert's descriptive model of management practices referred to as System 1, 2, 3 and 4, for the Management Development and Training Program for Colleges and Universities.

A Framework for Viewing the Individual Manager in a College or University

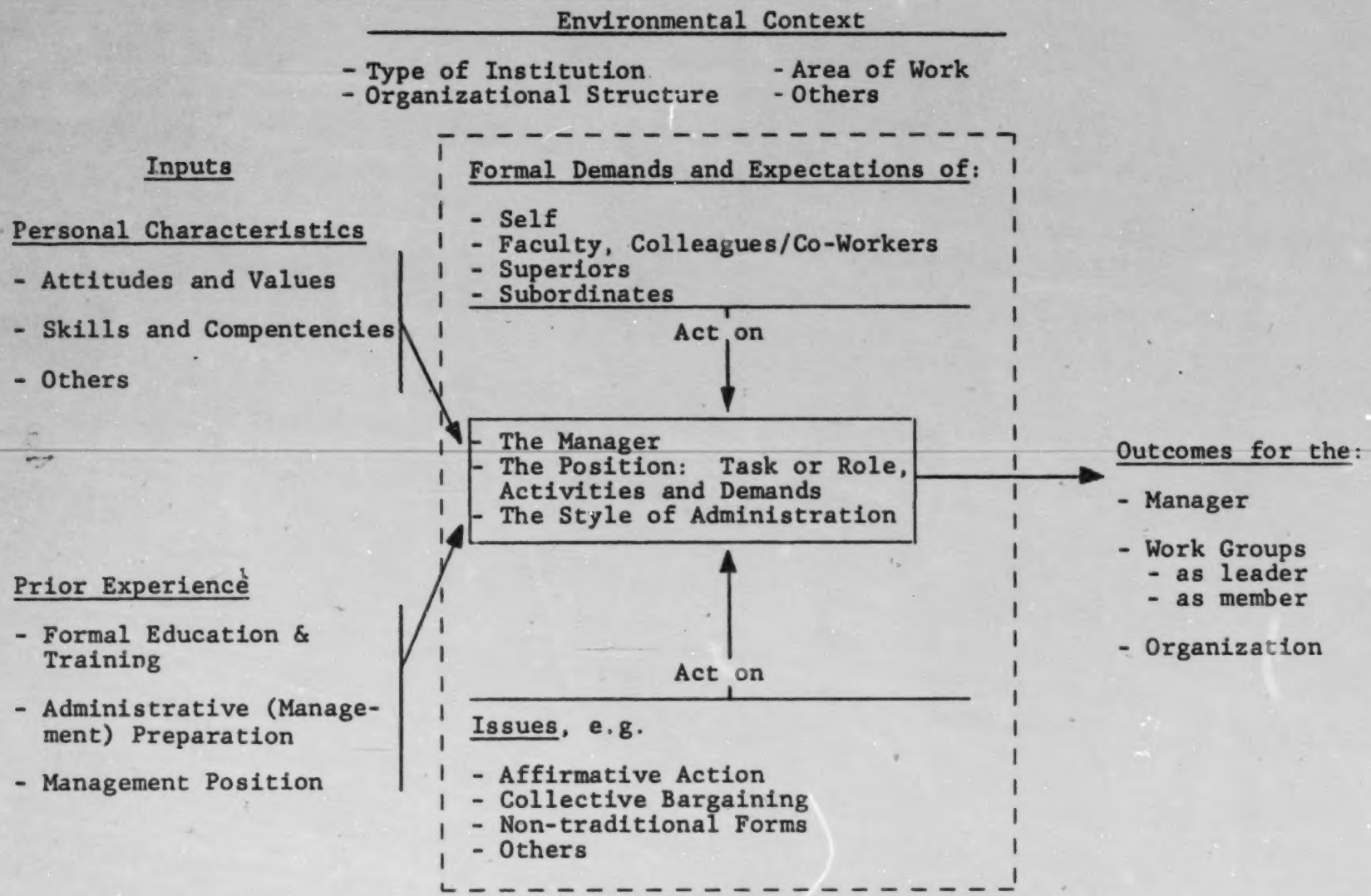


Figure 11

Source: Adapted from Peterson, 1976, page 4.

8. THE ADAPTATION OF INDUSTRIAL SURVEY-GUIDED NEEDS ASSESSMENT TO HIGHER EDUCATION

8.1 Introduction

From the beginning of the project in the spring of 1976, the Higher Education Management Institute and its consultants have undertaken an extensive review of the relevant literature and of current practices in industry and government related to management development and training. Based on this research, the Institute has adopted a survey-guided approach to management development and training in higher education. A separate report on the State-of-the-Art of Management Development and Training has been produced by the Institute and it documents in detail the rationale behind our selection of this approach.

Under the leadership of Rensis Likert, the Institute for Social Research at the University of Michigan has developed an approach to management development and training that is heavily dependent on the creation of a data base that actually describes the functioning of an organization. This approach is described in Bowers and Franklin (1976). (See bibliography in Attachment D).

In adopting the survey-guided approach to management development and training in higher education, the Institute realizes that it is breaking new ground and that it is making assumptions that need to be substantiated despite the success of this approach in other private and public organizations. As the project continues, we will be collecting the necessary data to evaluate this approach.

A separate manual has been produced by the Institute that describes the rationale behind, as well as detailed instructions for, the administration of the survey questionnaires designed to assess management development and training needs. The manual consists of six major sections:

Section 1 describes the objectives and organization of the manual and provides an overview of the management development and training program for colleges and universities.

Section 2 contains a brief discussion of the basic concepts and rationale for the Needs Assessment Program. This includes references to key items in the literature dealing with the organizational theory on which the approach is built, as well as the research related to the survey methodology itself.

Section 3 provides an explanation of the structure of the survey questionnaires to be used, in terms of the organizational variables to be assessed.

Section 4 provides instructions for the administration of the survey questionnaires. These instructions vary for each of the target groups included in the survey.

Section 5 describes the output reports to be produced and an outline of data analysis and feedback procedures.

Section 6 contains copies of each of the survey questionnaires for the board, president, vice president, deans, department heads, faculty, students, non-academic administrators and non-academic employees.

8.2 A Model of Management Effectiveness for Colleges and Universities

One of the basic assumptions of the management development and training program for colleges and universities is that an improvement in the effectiveness of college and university management will lead to an improvement in institutional effectiveness. This implies that we must deal with the concept of institutional effectiveness, the concept of management effectiveness, and the relationship between management effectiveness and institutional effectiveness. Obviously, this is no small task. In the next few paragraphs we will attempt to provide a brief overview of our approach to these concepts.

8.3 College and University Effectiveness

The definition of effectiveness as it applies to higher education has always been a difficult task. This is the result of the lack of agreed upon, clear, or easily quantifiable objectives in higher education. In recent years considerable attention has been paid to the concept of effectiveness in higher education and some progress has been made in its definition. The National Center for Higher Education Management Systems (NCHEMS) at the Western Interstate Commission for Higher Education (WICHE) has developed an Outcome Measures and Procedures Manual (1975), which provides a comprehensive listing of possible outcomes of higher education and alternative ways of measuring those outcomes.

In order to be able to monitor to some degree the effect of the management development and training program on a particular institution, a student sample will be asked questions to assess their perceptions of some key outcomes.

In addition, a sample of faculty and staff will be surveyed to assess their perceptions of outcomes related to employee satisfaction.

The student, faculty and staff outcome measures were chosen because it is feasible to assess their status in quantitative terms within the limitations of the project. At the same time, it should be made clear that these indicators are not intended to be comprehensive and all-inclusive. A series of other outcome measures should be considered, including:

- Financial indicators such as those reported in the September, 1976 issue of Change Magazine;
- Scores on the Institutional Functioning Inventory (IFI) conducted by the Educational Testing Service (ETS);
- Student indicators compiled through the ACE Cooperative Institutional Research Program (CIRP).

8.4 Management Effectiveness

Over the last 30 years, Dr. Rensis Likert and his colleagues at the Institute for Social Research and at Rensis Likert Associates, have developed a model of organizational effectiveness which in the Institute's opinion merits serious consideration by managers of higher education. (See Figure 12). In conceptual terms, the model consists of a set of causal management variables which significantly relate to a set of intervening work group variables, which in turn relate to a set of end result or outcome variables.

The causal management variables in the organization are those within the capability of the leadership to modify, and, if modified, bring about corresponding changes in the other variables, including performance. Intervening variables measure the net effect of several interrelations, including those between managers and subordinates, and among subordinates. (RLA, Inc., 1972, page III-IV.)

Based on extensive research in the field, Dr. Likert and his colleagues have been able to establish that the management variables determine organizational effectiveness in a variety of organizational settings, such as

Higher Education Management
Development and Training Program

A Model of Management Effectiveness
for Colleges and Universities

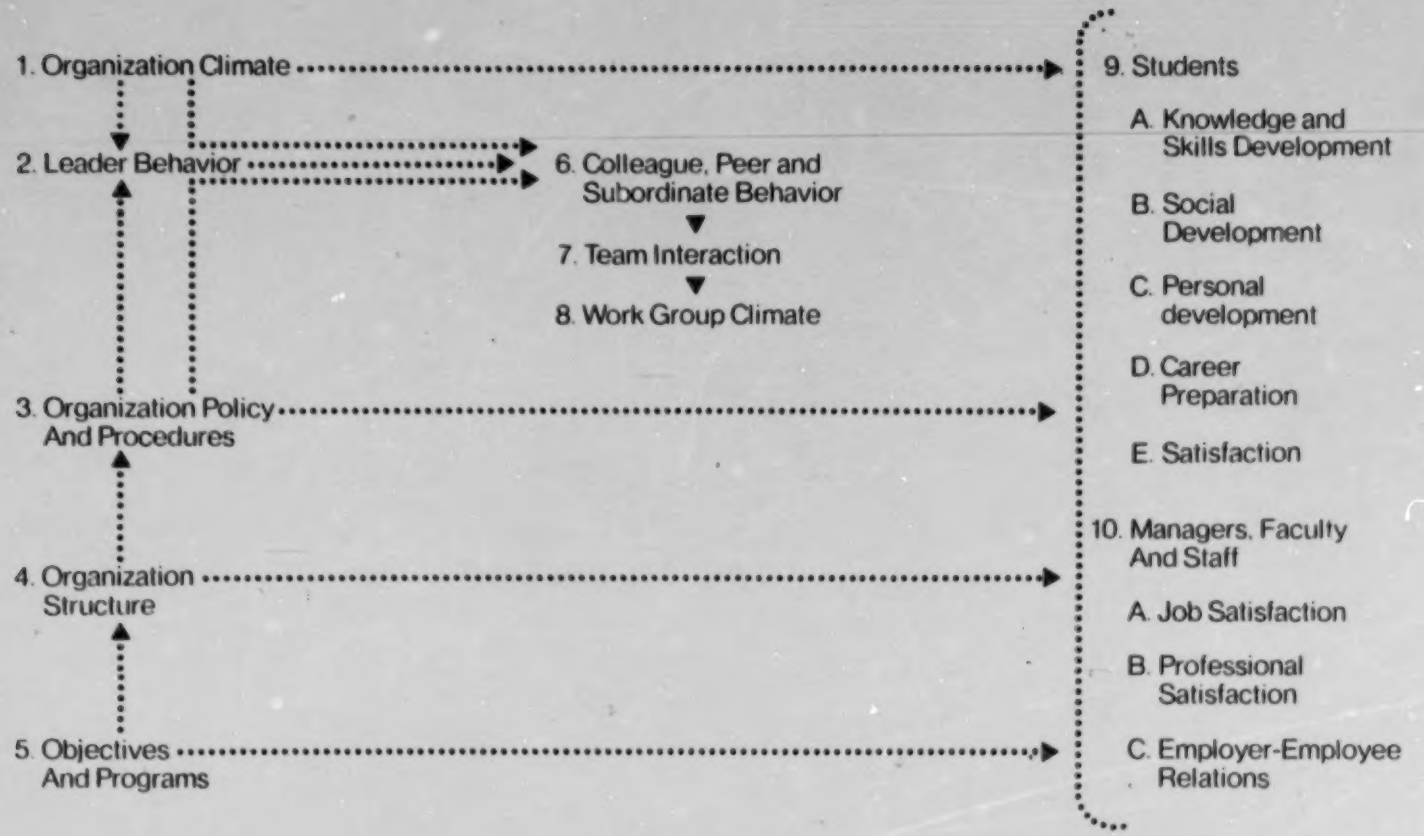


Figure 12

hospitals, public school systems, the Navy, and private industrial concerns (Likert, 1961; Likert, 1967; RLA, Inc., 1972; Taylor and Bowers, 1972; Bowers, 1975). Moreover, recent research at a number of postsecondary institutions appears tentatively to confirm the applicability of the model to higher education.

Dr. Likert has developed a way of describing the range or spectrum of management patterns along a scale with four major segments. One of the key objectives of this project is to determine whether research results indicating the effectiveness of the tendency toward the System 4 management for various types of public and private organizations, can be duplicated in colleges and universities.

8.3 The Nature of the Four Systems of Management

In 1961, Dr. Likert's book, NEW PATTERNS OF MANAGEMENT, condensed his organizational findings into a conceptual framework for describing the spectrum of existing management patterns. He called these System 1, 2, 3 and 4. Each one basically differentiates a pattern of how people in a system deal with each other in accomplishing the organization's mission. The System 1 organization is exploitative-authoritative in its approach to employees. System 2 describes a benevolent-authoritative pattern of operation, while System 3 becomes consultative and System 4 is participative. Figure 13 illustrates the leadership patterns that are characteristic of each of the four systems.

By the time Likert's book, THE HUMAN ORGANIZATION, appeared in 1967, evidence had been accumulated that the more an organization moved from System 2 or 3 toward System 4 patterns, the better its performance as measured by objective end results.

A System 1 organization operates on a one-way coercive model. The leader is usually extremely competent and often a charismatic personality. He knows exactly what needs to be done. His subordinates are hired solely to do what he orders. The leader needs or wants no information from his employees. All communications come downward, and the system has immediate punishment for anyone who does anything beyond the leader's orders. It is a coercive, fear-laden model operation.

The System 2 organization operates on a one-to-one competitive model. The leader supervises each of his subordinates on a one-to-one basis. He assigns specific tasks in accordance with the special talents of his people. Normally, he makes all decisions on what is to be done and passes orders. In selected cases he finds it useful to obtain information or a

Higher Education Management
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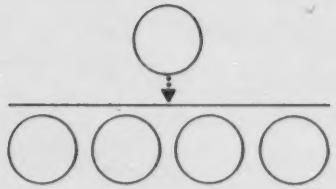
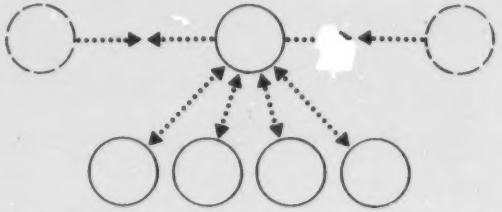
Leadership Patterns

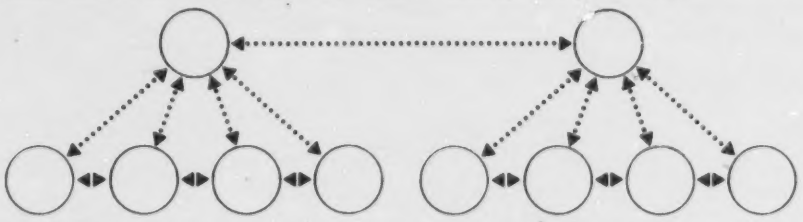
System 1.
One-Way Coercive



System 2.
One-to-One Competitive



System 3.
One-to-One Consultative



System 4.
Group Interaction:
Collaborative

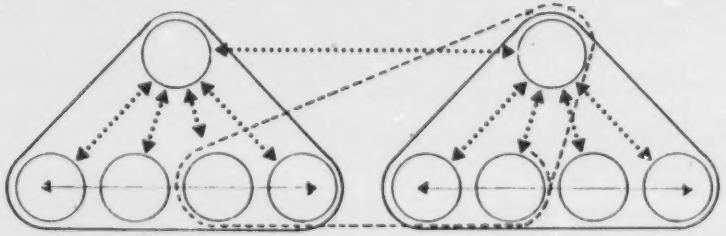


Figure 13

reaction from a subordinate before he takes action. To conserve time, such contacts are generally on a one-to-one basis.

The System 3 organization operates on a one-to-one consultative pattern. Here, the leader develops a consultative way to deal with his subordinates individually. He encourages each subordinate to become an accomplished specialist and he respects that competence once it is developed. Frequent and candid communication evolves. There is generally a two-way flow of information, ideas and influence on a decision which is finally made by the leader.

The System 4 organization has learned how to operate under a group interactive-collaborative model. Here the leader uses all the one-to-one consultative relationships of System 3. In addition, the two-way communication becomes a team-building process for the entire work group. When decisions appropriate for his level need to be made, the System 4 leader habitually uses group meetings, rather than individual conferences, to develop the maximum relevant information. He invites the open participation of as many members of his immediate work group as can conveniently attend. The leader conceals no information from the group. He not only obtains a candid up-down exchange of ideas, but also promotes lateral exchange of views and information and critique among all participants. It becomes a group session for problem identification and problem solving. The leader does not abdicate his responsibility for a decision. If there is no group consensus on the best way to proceed, he readily makes the decision, confident that the group's members have shared all the relevant facts they can muster.

8.6 Survey Description

The work of developing the survey questionnaire for the Needs Assessment Program has been shared by Jane Gibson Likert and Rensis Likert of Rensis Likert Associates, Inc. and the Higher Education Management Institute. The questions used to assess organization climate, leader behavior, as well as the intervening variables, were developed by RLA. These questions are based on extensive research in other organizations and have been specifically adapted for higher education. The questions used to assess organization policy and procedure, organization structure, objectives and programs, as well as student, faculty and staff outcome variables, were developed by the Institute.

The Needs Assessment questionnaires measure the major dimensions of the human and procedural aspects of the management of colleges and universities. Some of these dimensions measure the degree to which authoritarian or participative patterns of leader and group behavior are employed. Some measure the motivational and other consequences of the leadership patterns used. Other dimensions measure the adequacy of the institutions' objectives, organization structure, policies and procedures. These measurements serve two major purposes. They provide the data for organizational diagnoses to guide efforts for organizational improvement. They also serve as benchmarks to determine whether the organization is changing and in what direction the change is taking place. Figure 14 displays the indices which will be part of assessing each of the five causal and two intervening variables shown in Figure 12. Three to six survey questions are used to compose each of the indexes.

In addition, the outcome variables will assist in the overall assessment of the effectiveness of the Management Development and Training Program by allowing us to begin to measure the impact of changes in management practices on institutional outcomes.

The data generated by this survey will be tabulated by the Institute to obtain measures of the extent to which effective management practices are used in the institution, based on the perceptions of those responding to the initial survey. The tabulations that deal with an individual manager or an individual work group are restricted data which the Institute will provide only to the immediate manager of each work group. The data tabulation and work group packages will be ready for feedback to the institution within five weeks of receipt of all answer sheets. The questionnaire answer sheets are read by optical scanning equipment and profile charts, such as the one shown in Figure 15, along with computer processed statistical reports on responses, will be prepared for each work group. Summary profiles for the whole and various parts of the institution will also be prepared. Careful attention has been paid to protecting the anonymity of individual respondents and of individual work groups.

For those institutions that are interested in comparing their institutional situation to that of other organizations, a variety of possibilities are open. Comparisons between university and college results and comparable sized industrial concerns can be made using the data bank at the University of Michigan. Comparisons against hospitals or school boards can also be carried out. Furthermore, depending on the willingness of the participating colleges and universities, comparisons of individual institutions against group scores for all of some sub-set of the pilot institutions can be produced. Any pair or group of institutions may also agree to share their findings and compare their situations.

Figure 14

CAUSAL MANAGEMENT VARIABLES AND INDEXES

1. Organization Climate
   - Goal commitment
   - Decision process
   - Team cooperation

2. Leadership
   - Leader support
   - Goal emphasis
   - Team building
   - Perceived competence

3. Policies and Procedures
   - Planning and budgeting
   - Financial management
   - Personnel management
   - Student services
   - Development

4. Organization Structure
   - Governance
   - Formal and informal relationship

5. Objectives and Methods
   - Objectives
   - Programs
   - Facilities and services

INTERVENING WORK GROUP VARIABLES AND INDEXES

6. Colleague, Peer and Subordinate Behavior
   - Goal emphasis
   - Support
   - Peer team building

7. Team Interaction
   - Support
   - Team work
   - Self motivation

8. Work Group Climate
   - Communications
   - Frustration index

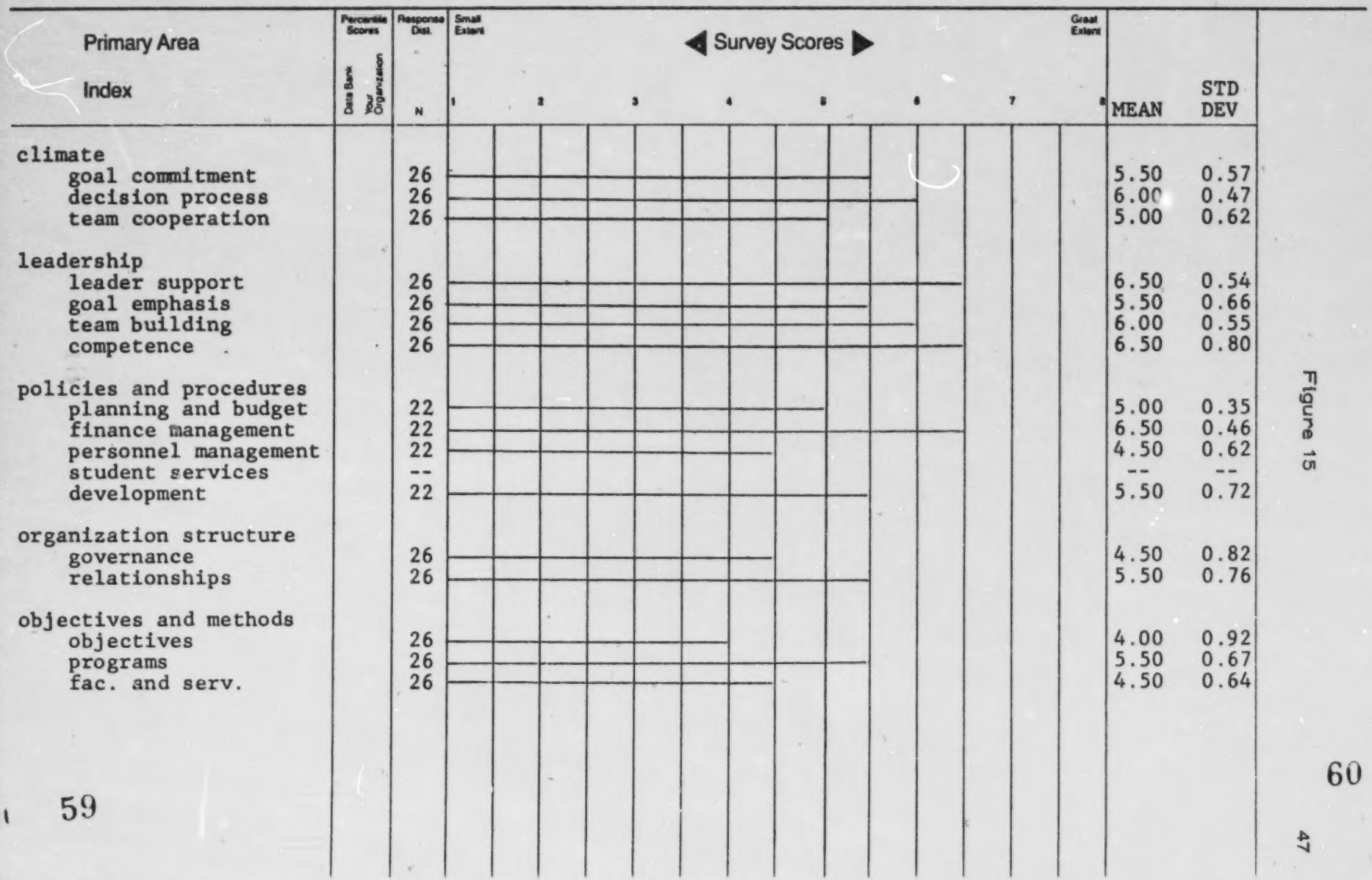

Primary Area
Index
Percentile Scores
Data Bank
Your Organization
Response Dist.
N
Small Extent
Survey Scores
Great Extent
1
2
3
4
5
6
7
8
MEAN
STD DEV
climate
goal commitment 26 5.50 0.57
decision process 26 6.00 0.47
team cooperation 26 5.00 0.62
leadership
leader support 26 6.50 0.54
goal emphasis 26 5.50 0.66
team building 26 6.00 0.55
competence 26 6.50 0.80
policies and procedures
planning and budget 22 5.00 0.35
finance management 22 6.50 0.46
personnel management 22 4.50 0.62
student services -- -- --
development 22 5.50 0.72
organization structure
governance 26 4.50 0.82
relationships 26 5.50 0.76
objectives and methods
objectives 26 4.00 0.92
programs 26 5.50 0.67
fac. and serv. 26 4.50 0.64

Figure 15

As a final part of the assessment phase, Institute representatives will work with each pilot college and university on their campus in order to discuss fully the implications of the results and assist them in making a decision as to how they might best proceed.

Figure 16 lists the various activities that have to be accomplished between the beginning and the end of the needs assessment phase. The questionnaires themselves take an average of thirty minutes to complete.

Higher Education Management Institute

Management Development and Training Program

Figure 16

Survey Control Form C

49

College/University Name:

List of Tasks:	Start Date	Completion Date
1. PRODUCE LIST OF WORK GROUPS		
2. DECIDE ON FACULTY TO BE SURVEYED		
3. DECIDE ON STUDENTS TO BE SURVEYED		
4. PRODUCE LIST OF INDIVIDUALS		
5. SET START DATE OF SURVEY		
6. SET COMPLETE SURVEY SCHEDULE		
7. SURVEY ANNOUNCEMENT		
8. SPECIFIC NOTICES		
9. CONDUCT SURVEY		
10. CHECK SURVEY ANSWER SHEETS		
11. CHECK SURVEY COMPLETION		
12. SUBMIT MATERIALS TO HEMI		
SURVEY FEEDBACK		
1. PRELIMINARY ANALYSIS		
2. SELECTED INTERVIEWS		
3. ADDITIONAL DATA COLLECTION		
4. GENERAL PRESENTATION		
5. DISTRIBUTION OF REPORTS		
6. FOLLOW-UP DISCUSSIONS		
7. DETERMINE PRIORITIES		

9. A PROPOSED METHODOLOGY FOR EVALUATING THE EFFECTIVENESS OF THE PROGRAM

As stated previously in Section 3, the 24 pilot institutions are not intended to be representative of the situations found in the approximately 3,000 colleges and universities in the United States. However, within the limits of the selection process, the relatively small sample of 24 institutions, and the budgetary constraints of the project, we intend to carry out an evaluation of the impact of the management development and training program.

The management effectiveness model described in Figure 12 and quantified using the Needs Assessment survey described in Section 8, provides us with a basis for measuring the change in an institution, both in the causal management variables and in the institutional outcome variables. We realistically expect to have great difficulty perceiving an impact on the outcome measures during the project's two year time period. However, we should be able to detect movements in the causal and intervening management variables, if the program is effective.

Figure 17 outlines a proposed methodology for assessing the separate impacts on the causal and intervening variables and outcome measures of: the needs assessment process itself; institutionally developed and administered programs; and the Institute supported activities.

This design is predicated on the assumption, which we believe will prove to be correct, that several of the pilot institutions will, as the project proceeds, choose each of the four project status positions outlined in Figure 17.

PROJECT STATUS I - INSTITUTIONS

Several of the pilot institutions will choose to continue beyond the Needs Assessment phase in order to carry out the other activities planned in our overall program design. Furthermore, they will choose to do this with their active involvement of the Institute, both in organizing and carrying out the program. It also seems likely that the magnitude and intensity of the program in each of these institutions may vary, depending on their needs, situation and ability and willingness to commit management time.

Management Development and Training Program for Colleges and Universities

EVALUATION METHODOLOGY

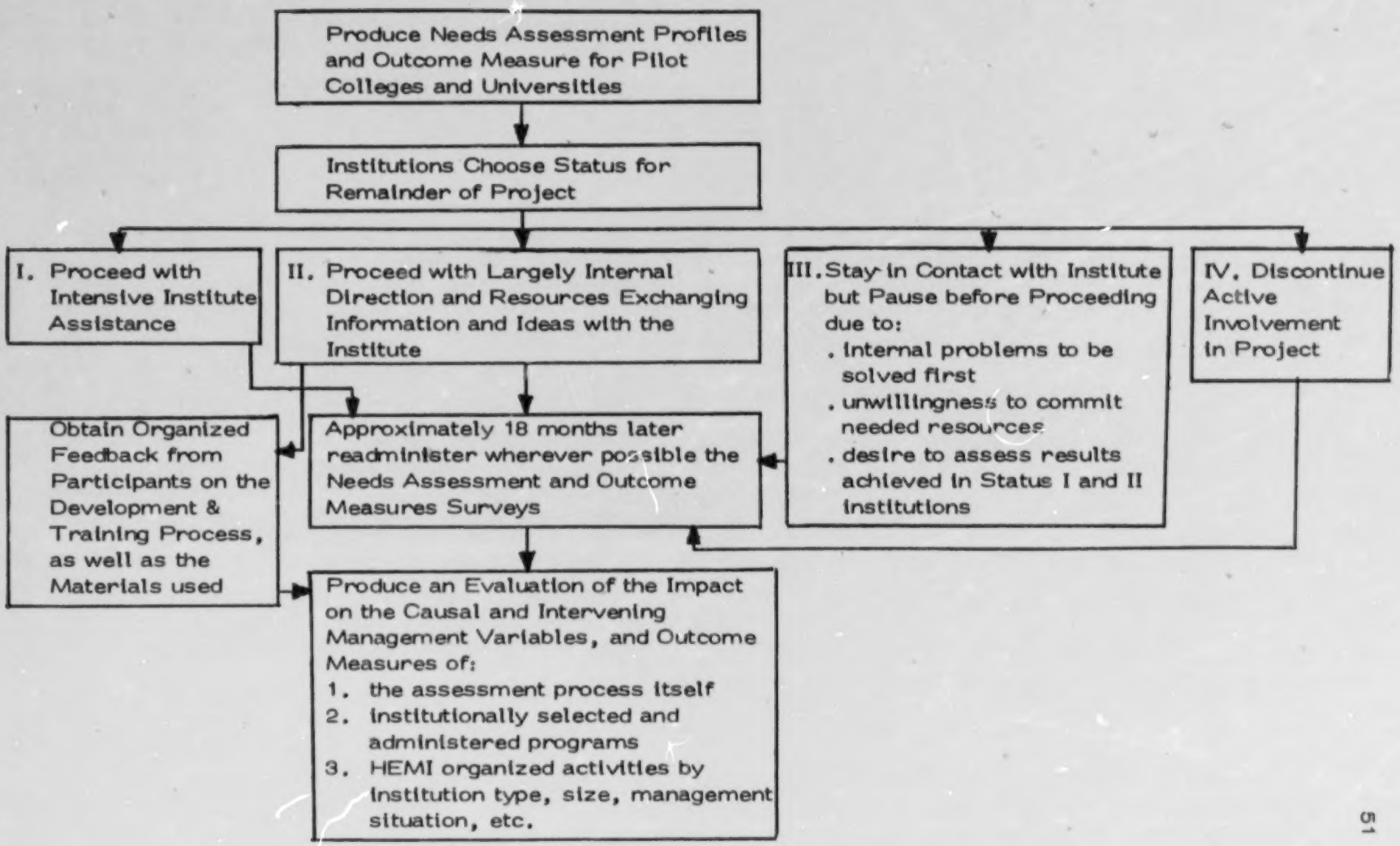

Produce Needs Assessment Profiles and Outcome Measure for Pilot Colleges and Universities
Institutions Choose Status for Remainder of Project
I. Proceed with Intensive Institute Assistance
II. Proceed with Largely Internal Direction and Resources Exchanging Information and Ideas with the Institute
III. Stay in Contact with Institute but Pause before Proceeding due to:
. internal problems to be solved first
. unwillingness to commit needed resources
. desire to assess results achieved in Status I and II institutions
IV. Discontinue Active Involvement in Project
Obtain Organized Feedback from Participants on the Development & Training Process, as well as the Materials used
Approximately 18 months later readminister wherever possible the Needs Assessment and Outcome Measures Surveys
Produce an Evaluation of the Impact on the Causal and Intervening Management Variables, and Outcome Measures of:
1. the assessment process itself
2. institutionally selected and administered programs
3. HEMI organized activities by institution type, size, management situation, etc.

Figure 17

PROJECT STATUS II - INSTITUTIONS

Some of the institutions participating in the project have full or part time management development coordinators, have already committed significant internal resources, and have either the beginnings of or fairly well developed programs under way. These institutions, or others that may choose this model, may decide that they would like to keep in touch with the Institute in order to take advantage both of the ideas and materials produced by it, but essentially will organize and carry out their programs on their own. The project may benefit greatly from their contributions, and they will undoubtedly benefit from the experiences and products of the project.

PROJECT STATUS III - INSTITUTIONS

Once the Needs Assessment phase is completed, some of the pilot institutions may feel that they are not in a position to be able to proceed immediately, although they would like to proceed at some future date. This delay may be caused by internal problems that are highlighted by the Needs Assessment activity, and that have to be dealt with before the program can continue. Or as the institution comes to understand the commitment in time and effort required on the part of the management of the institution, it may decide that it is not ready at this point to make that commitment. The delay may also be a result of the desire on the part of some institutions to assess the results achieved in those institutions that are involved in Status I or II before making a final decision as to whether to participate, and if so, on what basis.

PROJECT STATUS IV - INSTITUTIONS

Another group of institutions may decide to discontinue their active involvement in the project for a variety of reasons, some of which may be internal to the institutions, and some of which may relate to their perceptions of the immediate costs and benefits of the program.

The result of the natural selection process, which we are suggesting will occur, means that we will be able, if the needs assessment and outcome measures surveys are readministered some 18 months after they are first used, to make a reasonable estimate of the separate impacts of various parts of the overall program and of various ways of carrying it out. In the subsequent project reports, we will elaborate on this design, particularly as we gain more insight into how many institutions will

fall into each of the status categories.

In the longer term, as other institutions begin to participate in the program, we expect to be able to continue to collect this information and ultimately be able to make some definitive statements with regard to the impact of various kinds of development and training activities on the causal and intervening management variables and ultimately on the performance of the institution as represented by the outcome measures.

ATTACHMENT A

LIST OF WORKING PAPERS

#	DESCRIPTIVE TITLES	AUTHOR
1.	Standards for Institute Working Papers and Reports	RSW
2.	Project Organization and Initial Activities	JBL
3.	Organization and Use of the Institute's Information Resources	RSW
4.	Current Activity in Higher Education Management Development and Training	RSW/CZ
5.	Evaluation & Feedback in Higher Education Management	RL
6.	Review of Current Programs in Public Administration	RL
7.	University Management and the Department Chairperson	RL
8.	Review of Selected Graduate Programs in Business Administration and Higher Education	RSW
9.	Review of Leading Management Development Programs in the Private Sector	BOS
10.	Continuing Education Units: Feasibility for Higher Education Management Development Programs	RSW
11.	The Applicability of "Open University" Concept to Management Development Programs in Higher Education	BOS
12.	Issues and Alternatives Involved in Acceptability and Marketability of Management Development Programs in Higher Education	JD
13.	A Preliminary Outline of the Proposed Higher Education Management Program	AVW
14.	A Study of Management Development Needs Analysis Surveys for Higher Education	CZ/GD RSW
15.	Management Skills and Attitudes of Departmental Chairpersons: A Review of the Literature	SC
16.	Management Skills and Attitudes of Academic Deans and Chief Academic Officers: A Review of the Literature	RB

#	DESCRIPTIVE TITLES	AUTHOR
17.	Development and Training for Academic Managers: A Review of the Literature	ML
18.	Training and Development of Academic Administrators: A Critique and Recommendations	MWP
19.	Business Affairs Management Education and Staff Development: A Review of the Literature	JM
20.	College and University Student Personnel In-Service Management Education and Development: A Review of the Literature	EAG
21.	State-of-the-Art Report of Higher Education Management Development and Training Programs	AVW/RSW
22.	A Discussion of the Implications of Various Stages of Organizational Development on Management Training	GW

Attachment B

Higher Education Management Institute

Summary of College and University Proposals Received

as of

October 15, 1976

Total proposals received	454
Proposals not selected after first screening	300
Proposals not selected after group evaluation, second round screening	96
Proposals not selected after telephone interview with president or vice president, third round screening	15
Proposals accepted, subject to site visits or further contact	44
Institutions not selected or declining invitations to participate after site visits or further contact, fourth round screening	20
Institutions invited to participate	24

ATTACHMENT C

EXXON EDUCATION FOUNDATION

111 WEST 49TH STREET, NEW YORK, NEW YORK 10020

FREDERICK deW. BOLMAN
Executive Director

6/30/76

Dear President

The Exxon Education Foundation now has a new project in college management that may be of interest to you and your institution. It is designed to provide an on-campus comprehensive training program in management practices, procedures, and theory for administrators at all levels in a college or university including department chairmen. We were motivated to set up this project because, although there are numerous excellent training programs available for college and university administrators, these appear to be falling far short of the training needs of the higher education community. The experience of non-educational institutions suggests that this is because training in managerial and administrative skills is fully effective only when it is presented as a comprehensive program that involves all of the appropriate individuals in a given organization and is tailored to the specific needs of that organization. Our new training project emphasizes both this need for a total organizational approach to teaching managerial skills and the need to adapt the training program to the management needs of the individual college or university.

We are inviting all degree-granting colleges and universities that are qualified as tax-exempt by the Internal Revenue Service and physically located within the fifty states or District of Columbia to apply for participation in this training program. From those that apply, five institutions will be selected as representative of different major segments of the higher education community such as public community colleges, state universities, private colleges, and private universities.

The institutions selected will participate in the development of a management training program for their administrators suited to their specific training requirements over a period of approximately three years. Each program will be designed and implemented by the Higher Education Management Institute, a non-profit corporation specifically organized to develop integrated training programs in this area. The training programs developed at

the five selected colleges and universities will then serve as prototypes for a series of training programs to be made available to all institutions. Although a participating college or university will normally have to allocate some staff resources to this project, the cost of providing the services of the Institute's staff to the college or university will be borne by the Foundation. Funds will be available for special costs generated at the institution.

If you are interested in having an integrated management training program of this type take place on your campus, I invite you to apply to be one of the institutions participating in the pilot project. A preliminary application may be made by letter to the Higher Education Management Institute. Please include the following information:

1. Name of Institution.

2. Name, Title, Office Address, and Telephone Number of the Chief Executive Officer.

3. A brief description of your institution, its programs, student body, and faculty.

4. A brief description of the recent past, current, and expected future financial situation of your institution.

5. A brief description of what activities, you are currently or would like to be engaged in, for improving the management capabilities and performance of your institution.

Your letter of application should be addressed:

Higher Education Management Institute
Suite 1000-A
2699 South Bayshore Drive
Coconut Grove, Florida 33133

Telephone: 305-854-2318

Cordially,

F. deW. Bolman

BIBLIOGRAPHY

Part A

Anderson, Scarvia B.; Ball, Samuel; Murphy, Richard T., et al. ENCYCLOPEDIA OF EDUCATIONAL EVALUATION. San Francisco: Jossey-Bass, 1975.

Bare, Alan. "Work Group Survey." New Brunswick, N.J.: Office of Personnel and Organizational Development, Rutgers University, 1975.

Barr, R. Benson. "Chief Academic Officers and College Deans: A Review of the Research Literature on Their Characteristics, Roles, and Styles." Coconut Grove, FL: Higher Education Management Institute, 1976.

Bennis, Warren. THE UNCONSCIOUS CONSPIRACY: WHY LEADERS CAN'T LEAD. NY: AMACOM, 1976.

Bergquist, William and Shoemaker, William. "System-Based Planning for Institutional Change." Washington: CASC, 1975.

Bowers, David G. "Organizational Development: Promises, Performances, Possibilities." ORGANIZATIONAL DYNAMICS, Vol. 4, No. 4, Spring, 1976, pp. 50-62.

Bowers, David G. SYSTEMS OF ORGANIZATION: MANAGEMENT OF THE HUMAN RESOURCE. Ann Arbor: The University of Michigan Press, 1976.

Bowers, David G. and Franklin, Jerome L. SURVEY-GUIDED DEVELOPMENT: DATA BASED ORGANIZATIONAL CHANGE. Ann Arbor: Institute for Social Research, The University of Michigan, 1976.

Bowers, David G.; Franklin, Jerome L. and Pecorella, Patricia A. "Matching Problems, Precursors, and Interventions in OD: A Systematic Approach." JOURNAL OF APPLIED BEHAVIORAL SCIENCE, Vol. 11, No. 4, 1975, pp. 391-409.

Boyer, Ernest L. "Managing Tomorrow's Education" in Edward C. Bursk, ed. CHALLENGE TO LEADERSHIP: MANAGING IN A CHANGING WORLD. NY: Free Press, 1973.

Burke, W. Warner and Schmidt, Warren H. "Management and Organization Development: What is the Target of Change?" PERSONNEL ADMINISTRATION. March-April, 1971, pp. 1-18.

Bursk, Edward C., ed. CHALLENGE TO LEADERSHIP: MANAGING IN A CHANGING WORLD. NY: Free Press, 1973.

Carnegie Commission on Higher Education. MORE EFFECTIVE USE OF RESOURCES, THE. NY: McGraw-Hill, 1972.

Cleveland, Harlan. THE FUTURE EXECUTIVE. NY: Harper and Row, 1972.

Colombo, Sandra Ellen. "Higher Education Department and Divisional Chairpersons and Related Positions or Assistants." Coconut Grove, FL: Higher Education Management Institute, 1976.

Corson, John J. GOVERNANCE OF COLLEGES AND UNIVERSITIES: MODERNIZING STRUCTURE AND PROCESSES. NY: McGraw-Hill, revised edition, 1975.

Dressel, Paul L. HANDBOOK OF ACADEMIC EVALUATION. San Francisco: Jossey-Bass, 1976.

Dressel, Paul, and Mayhew, Lewis B. HIGHER EDUCATION AS A FIELD OF STUDY. San Francisco: Jossey-Bass, 1974.

Dubin, S. S.: Mezack, M., and Neidig, R. "Improving the Evaluation of Management Development Programs." Donald L. Kirkpatrick, compiler, EVALUATING TRAINING PROGRAMS. Madison, WI: ASTD, 1975.

Ernst & Ernst. GUIDELINES FOR SELF-EVALUATION OF ADMINISTRATIVE MANAGEMENT PRACTICES IN INSTITUTIONS OF HIGHER EDUCATION. Austin: Coordinating Board, Texas College and University System, 1969.

. . . EVALUATION OF INSTITUTIONS OF POSTSECONDARY EDUCATION: AN ANNOTATED LIST OF INSTRUMENTS. Washington, DC: Council on Postsecondary Accreditation, 1975.

Farnsworth, Terry. DEVELOPING EXECUTIVE TALENT. London: McGraw-Hill, 1975.

Griffin, Gerald, and Burks, David. APPRAISING ADMINISTRATIVE OPERATIONS: A GUIDE FOR UNIVERSITIES AND COLLEGES. CA: University of California Systemwide Administration, 1976.

Greenleaf, Elizabeth A. "Higher Education Literature Search Project: Outline for College and University Student Personnel In-Service

Management Education and Development, Summary Report." Coconut Grove, FL: Higher Education Management Institute, 1976.

Hausser, D.L.; Pecorella, P.A.; and Wissler, A. L. SURVEY-GUIDED DEVELOPMENT: A MANUAL FOR CONSULTANTS. Ann Arbor: University of Michigan, Organizational Development Research Program, Institute for Social Research, 1975.

Herzberg, Frederick I. "New Perspectives on the Will to Work." MANAGEMENT REVIEW. Vol. 63, Nov. 1974, pp. 52-54.

Herzberg, Frederick I. "One More Time: How do You Motivate Employees?" HARVARD BUSINESS REVIEW. Vol. 46, No. 1, (Jan.-Feb., 1968), pp. 53-61.

Hite, Anthony L., ed. ORGANIZATIONAL DEVELOPMENT: THE STATE OF THE ART. Proceedings of the Western Organizational Development Conference. Ann Arbor, MI: Foundation for Research on Human Behavior, 1971.

Hodgkinson, Harold, et al. A MANUAL FOR THE EVALUATION OF INNOVATIVE PROGRAMS AND PRACTICES IN HIGHER EDUCATION. Berkeley: Center for Research and Development in Higher Education, University of California, 1974.

Hunt, Jeanne K. "Literature Search: College Student Personnel Administration." Coconut Grove, FL: Higher Education Management Institute, 1976.

Huse, Edgar. ORGANIZATION DEVELOPMENT AND CHANGE. St. Paul, MN: West Publishing Co., 1975.

Keeton, Morris T. SHARED AUTHORITY ON CAMPUS. Washington, DC: American Association for Higher Education, 1971.

Kirkpatrick, Donald L., compiler. EVALUATING TRAINING PROGRAMS. Madison, WI: American Society for Training and Development, 1975.

Langendorf, Richard. "University Management and the Department Chairperson." Coconut Grove, FL: Higher Education Management Institute, 1976.

Laufer, Martin E. "Career Development Patterns and Administrative Training and Development Experiences of Higher Education Academic Managers." Coconut Grove, FL: Higher Education Management Institute, 1976.

Lawrence, Ben; Weathersby, George, and Patterson, Virginia W., ed. OUTPUTS OF HIGHER EDUCATION: THEIR IDENTIFICATION, MEASUREMENTS, AND EVALUATION. Washington, DC: WICHE, 1970.

Lawrence, Paul R. & Lorsch, Jay W. ORGANIZATION & ENVIRONMENT: MANAGING DIFFERENTIATION AND INTEGRATION. Boston: Harvard Univ., 1967.

Lawrie, J. W. and Boringer, Clayton W. "Training Needs Assessment and Training Program Evaluation," in Donald L. Kirkpatrick, compiler, EVALUATING TRAINING PROGRAMS. Madison, WI: ASTD, 1975.

Likert, Rensis. NEW PATTERNS OF MANAGEMENT. NY: McGraw-Hill, 1961.

Likert, Rensis. THE HUMAN ORGANIZATION: ITS MANAGEMENT AND VALUE. NY: McGraw-Hill, 1967.

Likert, Rensis and Likert, Jane Gibson. NEW WAYS OF MANAGING CONFLICT. NY: McGraw-Hill, 1976.

Mahoney, Francis Xavier. "An Investigation of the Competencies Appropriate for In-Service Training of Industrial Managers." University of Houston, 1973.

Matthies, Leslie H. THE MANAGEMENT SYSTEM. NY: John Wiley & Sons, 1976.

McClelland, David C., and Burnham, David H. "Power is the Great Motivator." HARVARD BUSINESS REVIEW. March-April, 1976, pp. 100-120.

Millett, John D. "Higher Education Management Versus Business Management," EDUCATIONAL RECORD. Vol. 6, No. 2, Fall 1975.

Mintzberg, Henry. THE NATURE OF MANAGERIAL WORK. NY: Harper & Row, 1973.

Mikesell, John L.; Wilson, John A., and Lawther, Wendell. "Training Program and Evaluation Model" PUBLIC PERSONNEL MANAGEMENT, Vol. 4, No. 6, Nov.-Dec., 1975, pp. 405-411.

Moxley, Linda S. "College and University Business Officers: Their Numerical Representation, Tasks, and Training." Coconut Grove, FL: Higher Education Management Institute, 1976.

National Association of College and University Business Officers. COLLEGE AND UNIVERSITY BUSINESS ADMINISTRATION. Washington, DC: The Association, 1974.

Odiorne, George S. "Evaluation of Management Training—What do we know about it?" in Donald L. Kirkpatrick, compiler, EVALUATING TRAINING PROGRAMS. Madison, WI: ASTD, 1975.

Peterson, Marvin W. "Literature Search: Research on Higher Education Academic Managers." Coconut Grove, FL: Higher Education Management Institute, 1976.

Peterson, Richard E. THE CRISIS OF PURPOSE: DEFINITION AND USE OF INSTITUTIONAL GOALS. Princeton, NJ: Educational Testing Service, 1970.

Peterson, Richard E. TOWARD INSTITUTIONAL GOAL-CONSCIOUSNESS. Princeton, NJ: Educational Testing Service, 1971.

Pfeiffer, J. William and Jones, John E. "A Current Assessment of OD: What it is and Why it Often Fails," in Pfeiffer and Jones, eds. THE 1976 ANNUAL HANDBOOK FOR GROUP FACILITATORS. La Jolla, CA: University Associates, 1976.

Rensis Likert Associates, Inc. THE LIKERT PROFILE OF A SCHOOL: MANUAL FOR QUESTIONNAIRE USE. Ann Arbor, MI: author, 1972.

Siepert, Albert F. and Likert, Rensis. "The Likert School Profile Measurements of the Human Organization." Ann Arbor, MI: Rensis Likert Associates, Inc., 1973.

St. John, Edward P. and Weathersby, George B. "Institutional Development in Higher Education: Implications for Planning and Management." Coconut Grove, FL: Higher Education Management Institute, 1976.

Talbot, John. "The Analysis and Costing of Management Training," in Bernard Taylor and Gordon L. Lippitt, eds., MANAGEMENT DEVELOPMENT AND TRAINING HANDBOOK. London: McGraw-Hill, 1975.

Taylor, Bernard and Lippitt, Gordon L., eds. MANAGEMENT DEVELOPMENT AND TRAINING HANDBOOK. London: McGraw-Hill, 1975.

Taylor, James C. and Bowers, David G. SURVEY OF ORGANIZATIONS: A MACHINE-SCORED STANDARIZED QUESTIONNAIRE INSTRUMENT. Ann Arbor: Institute for Social Research, The University of Michigan, 1972.

Thomas, Gerald S. and LaMountain, Dennis. "A Look Inside Training Needs Study." Ithaca, NY: Training and Development Office, Cornell University, 1975.

Tracey, William R. DESIGNING TRAINING AND DEVELOPMENT SYSTEMS. NY: American Management Association, Inc., 1971.

BIBLIOGRAPHY

Part B: Doctoral dissertations studying aspects of higher education management using Likert's method.

1. Bowers, John J., "The relationship between organizational variables and contemporary practices in small private liberal arts colleges in the state of Ohio." (Doctoral dissertation, The Ohio State University) Ann Arbor: University Microfilms.

2. Cline, T. A., "A study of the relationships between Colorado Community College faculty members' attitudes toward collective negotiations and their perceptions of the management styles used in their colleges." (Doctoral Dissertation, University of Colorado) Ann Arbor: University Microfilms, 1974, No. 74-12, 363.

3. Douglas, J. W., "An analysis of administrative leadership in physical education departments." (Doctoral dissertation, The Ohio State University) Ann Arbor: University Microfilms, 1969, No. 69-22, 122.

4. Gardner, C. A., Jr.,"Faculty participation. . ." (Doctoral dissertation, The Ohio State University) Ann Arbor: University Microfilms, 1971, No. 71-23, 763.

5. Gilbert, E. D., "Teaching styles prevalent in satisfying and dissatisfying college credit courses as perceived by adult students. (Doctoral dissertation, The Ohio State University) Ann Arbor: University Microfilms, 1972, No. 72-27, 010.

6. Javier, E. O., "Academic organizational structure and faculty/administrator satisfaction." (Doctoral dissertation, The University of Michigan) Ann Arbor: 1972, No. 72-29, 104.

7. Lasher, W. F. "Academic governance in university professional schools." (Doctoral dissertation, The University of Michigan) Ann Arbor: University Microfilms, 1974, No. 75-737.

8. Laughlin, R. A. "A study of organizational climate perceived by faculty in Colorado Community Junior Colleges." (Doctoral dissertation, University of Colorado) Ann Arbor: University Microfilms, 1973, No. 73-32, 562.

9. McAfee, S. R. W.,"Organizational variables and educational innovation in selected black colleges and universities: a comparative study." (Doctoral dissertation, The University of Michigan) Ann Arbor: University Microfilms, 1974, No. 75-755.